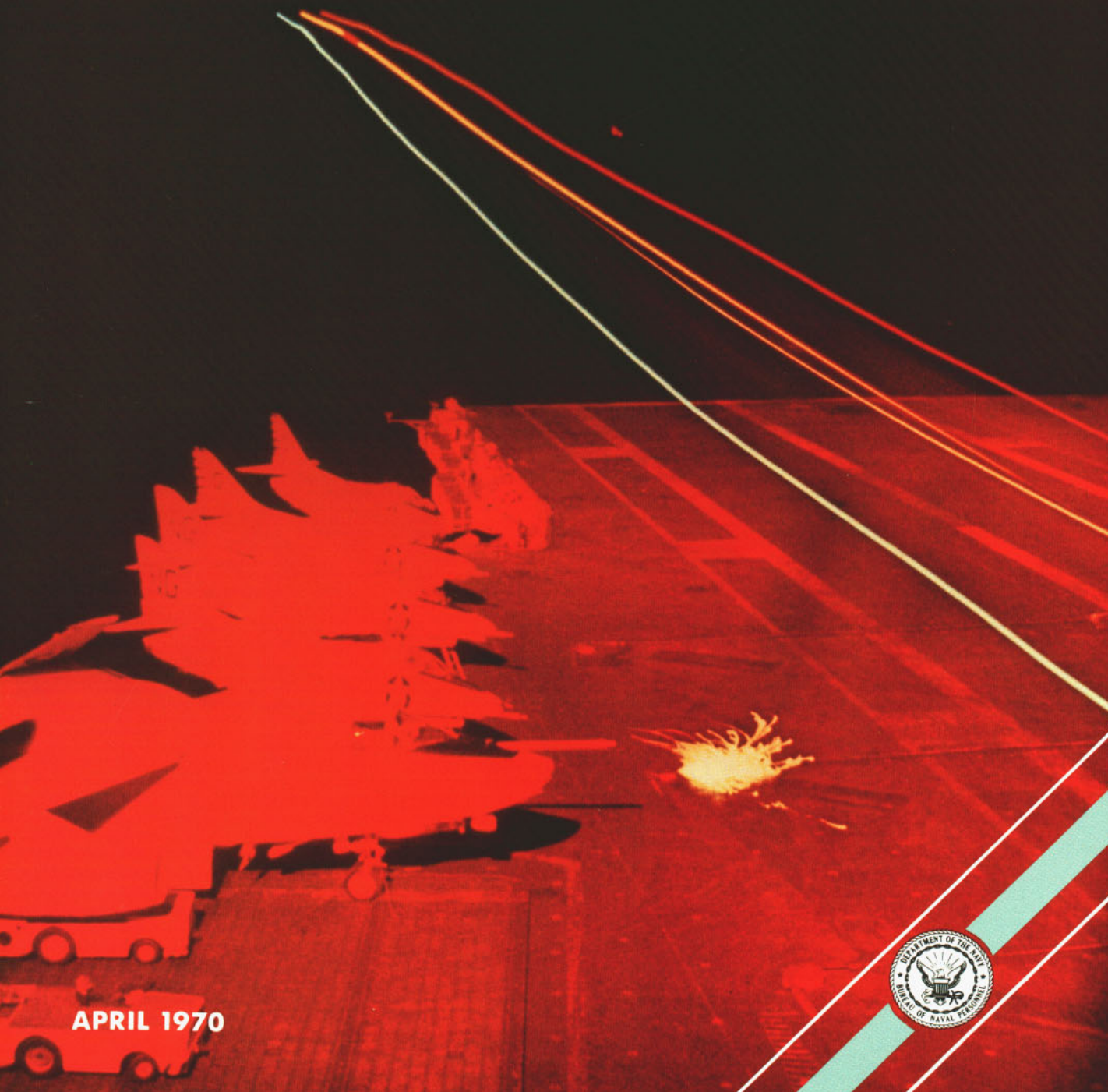


ALL HANDS



APRIL 1970





ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

APRIL 1970

Nav-Pers-O

NUMBER 639

VICE ADMIRAL CHARLES K. DUNCAN, USN
The Chief of Naval Personnel

REAR ADMIRAL D. H. GUINN, USN
The Deputy Chief of Naval Personnel

CAPTAIN H. W. HALL, JR., USN
Assistant Chief for Morale Services

TABLE OF CONTENTS

Features

| | |
|--|----|
| How To Communicate, Navy-Style | 2 |
| Watch That Next Step | 6 |
| Flag Plot at the Pentagon | 8 |
| Fill'er Up San Pedro | 10 |
| Chiefs, Backbone of the Navy | 12 |
| Drill Chief | 14 |
| Wonder Arch: Seabees Do It Again | 16 |
| NESEP at Purdue: Higher and Higher Education | 18 |
| A Sampling of ADCOP at Del Mar College | 20 |
| Bac Si: Sick Call in a Vietnam Village | 23 |
| The Little White Fleet of the U. S. Coast & Geodetic Survey | 24 |
| Ceremonial Guard | 30 |

Departments

| | |
|-----------------------------|----|
| Today's Navy | 34 |
| Letters to the Editor | 58 |
| Page 63: Navy Humor | 63 |

Bulletin Board

| | |
|---|----|
| New Contact Offices Provide Link Between Overseas Navymen and Family | 42 |
| Storage for Your Car While Overseas | 42 |
| Orders for AQ Technicians BuPers-Controlled | 44 |
| Transportation Roundup: Heading Overseas? | 46 |
| Refresher Training at Gitmo | 52 |
| Damage Control XVI | 53 |
| AFFF for America | 55 |
| Cinematography, Photo-Journalism Courses | 56 |

| | |
|---------------------|----|
| Taffrail Talk | 64 |
|---------------------|----|

John A. Oudine, Editor

Associate Editors

| | |
|-------------------------|---------------|
| JOCS Dan Kasperick, USN | News (Acting) |
| Ann Hanabury, | Research |
| Michael Tuffli, | Art (Acting) |
| Gerald Wolff, | Reserve |

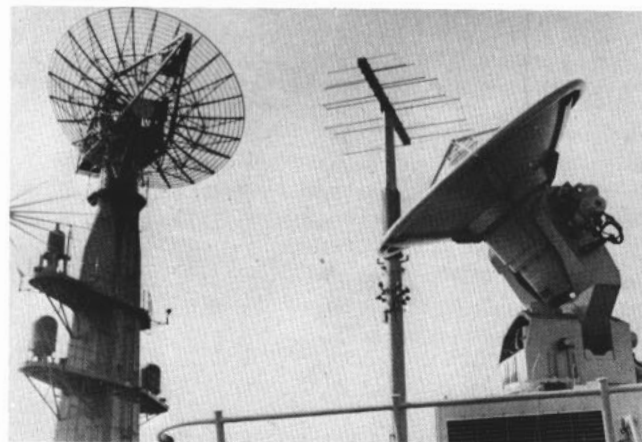
* FRONT COVER: NIGHT RECOVERY—Time exposure shows path of lights of aircraft as it lands aboard the attack carrier USS Ranger (CVA 61) in the South China Sea. Flash on flight deck is caused by arresting cable striking deck as it is pulled from cable housing by the plane's tailhook. A-4 Skyhawks and an A-3 Skywarrior, illuminated by red night lights, line deck at left.

—Photo by Senior Chief Journalist Jim Falk, USN.

* AT LEFT: TIGHT TURN—Guided missile destroyer USS Benjamin Stoddert (DDG 22) makes a high-speed turn while operating off Oahu.

—Photo by Photographer's Mate 3rd Class D. R. Hyder.





Navy ships today communicate in many ways, ranging from the old flashing light to sophisticated electronic gear. Antennas above are on command ship USS Wright.



How To Communicate Navy Style

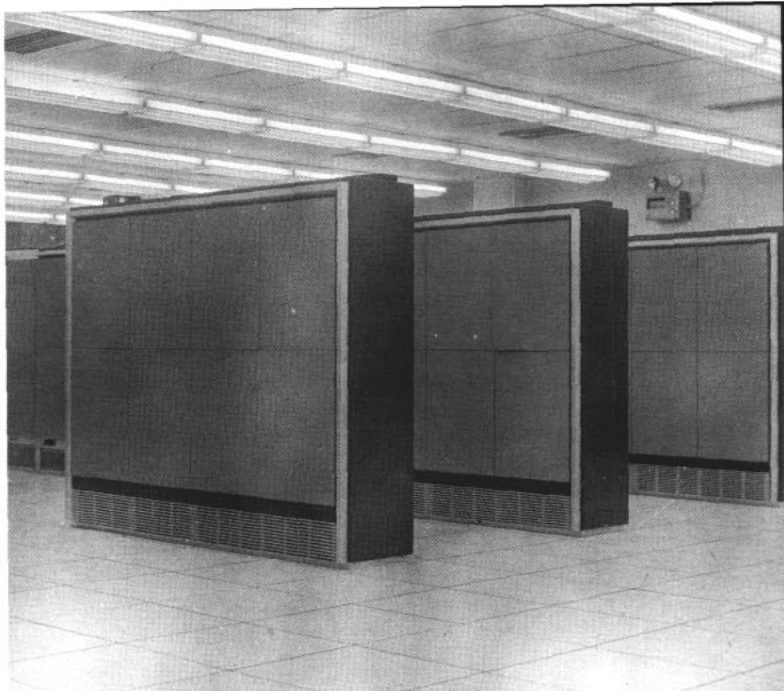
DURING MOST OF THE 173 years after Captain Thomas Truxton devised a message system for ships at sea, Navy communicators did their thing by hoisting flags, blinking lights and sending messages by carrier pigeon. Late in the 19th century the Navy began using the then-new wireless communication equipment.

About the middle of the 20th century, however, new developments began changing the picture as communicators moved into a world filled with electronic consoles, orbiting satellites and giant dish antennas.

The first big changes to the picture, of course, occurred during World War II when simple communications circuits developed into complex systems which, in turn, became large networks.

For example, new teletypewriter circuits were activated during the war, linking the east and west coasts of the United States and, in 1945, the first overseas radio teletypewriter channel linked Pearl Harbor to the mainland.

Other overseas extensions were inaugurated to



The Navy must still send many messages by flag hoist. Others are transmitted less colorfully, but faster, by AESC computers.

Guam, Balboa, Adak and San Juan and, by 1947, the Navy was ready to establish its first radio teletypewriter broadcasts to ships at sea.

The developments after the Japanese surrender in 1945 make it apparent that naval communications has kept pace with technological advances.

Communications had to cope with new operational requirements and the only answers to the new problems lay in more progress.

ALTHOUGH EACH OF THE more than 25 years since World War II has had its fair share of communications progress, the most significant growth occurred during the 1960s, especially in connection with Vietnam.

It doesn't require a specialist in the subject to deduce that communication is essential between the commanders in Washington and those with the U. S. naval forces in Vietnam. It can also be imagined that, under the circumstances, the east-west flow of information would be formidable.

Most command information concerning Vietnam

passes through the worldwide command and control system which could, if it were desirable, enable the Commander in Chief in Washington to control personally all United States armed forces in the Republic of Vietnam.

Within the larger system, individual networks link national authorities through the command chain to component leaders. Each of these smaller communications systems is compatible to and can be used with others in the large national system.

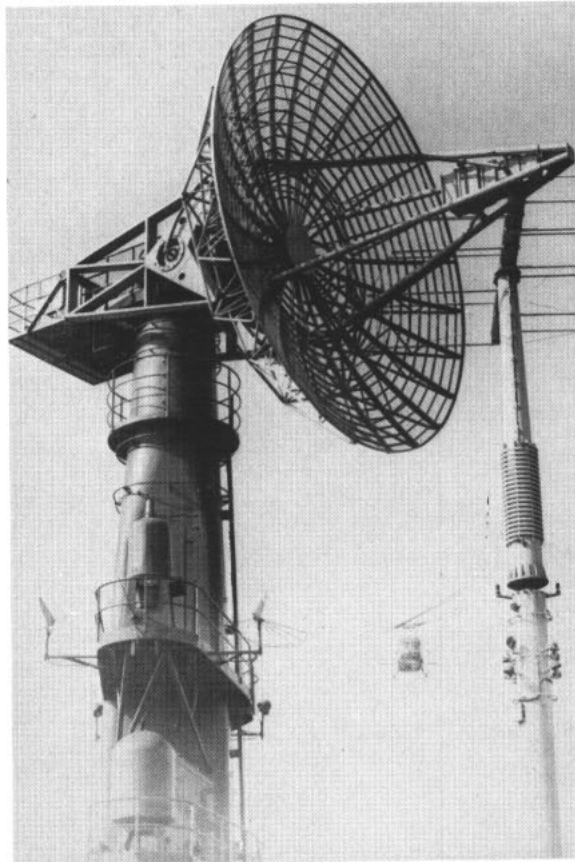
BUT INFORMATION BETWEEN national and local commanders isn't the entire communications show in Southeast Asia. Considerable operational and logistical message traffic passes between Fleet units and the three major communications stations for the Western Pacific located in Japan, Guam and the Philippines.

The ship-to-shore traffic passing through these stations is formidable and serves to emphasize the fact that the shore stations which encircle the globe have become the backbone of naval communications. Such stations are strategically positioned throughout the world and, until comparatively recently, functioned only as relays between ship and shore and from one ship to another.

During the 60s, however, they have played a larger role and additional communications stations in Australia and Vietnam have helped them do so.

The most recent major addition to the worldwide system is the station at Australia's Northwest Cape which provides reliable communications for the allied fleets in the Indian and Pacific Oceans.

The installation, which was named in honor of the late Australian Prime Minister Harold E. Holt, could be a study in superlatives but it will suffice to say that its central antenna mast is the highest man-made structure in the southern hemisphere and that it has



Left: Signalmen take a message at the flagbag of USS John F. Kennedy (CVA 67). Center: Navyman signals by semaphore. Right: Tropospheric scatter antenna aboard command ship Wright.

the world's largest antenna devoted to very low frequency (VLF) transmissions.

Another station at Cam Ranh Bay, about 186 miles north of Saigon, was also built in the 60s as a focal point for naval communications in Vietnam. This station has operational network circuits to all major Navy commands in Vietnam and a Fleet broadcast for ships in the South China Sea and Tonkin Gulf.

These new installations have enhanced the Navy's ability to respond to the command of national authorities and for Washington to be constantly in touch with the Fleet.

SO THAT NAVAL COMMUNICATIONS ashore can more effectively follow the Fleet, the world has been divided into eight major naval communications areas each of which concentrates on its own message needs. Each area has a master station to coordinate the activities of its local stations.

Direct high speed teletype circuits link the master stations with Fleet commanders, adjacent stations and all area stations so that the Fleet's needs can be acted upon immediately.

As mentioned earlier, the idea of naval communications following the Fleet in this manner has changed the traditional role of the shore communications station in Southeast Asia.

Stations no longer act merely as relay stations. Instead, they have become an actual and active participant in Fleet operations. They are, in fact, the hub of Fleet operational communications.

THE NEW IMPORTANCE of shore stations has also added to their responsibilities. Their communications circuits must be tended constantly and they must evaluate the development and progress of an operational situation.

This places a heavy burden of responsibility on the men who direct the stations' message traffic because their decisions could conceivably affect the course of operations having national and international importance.

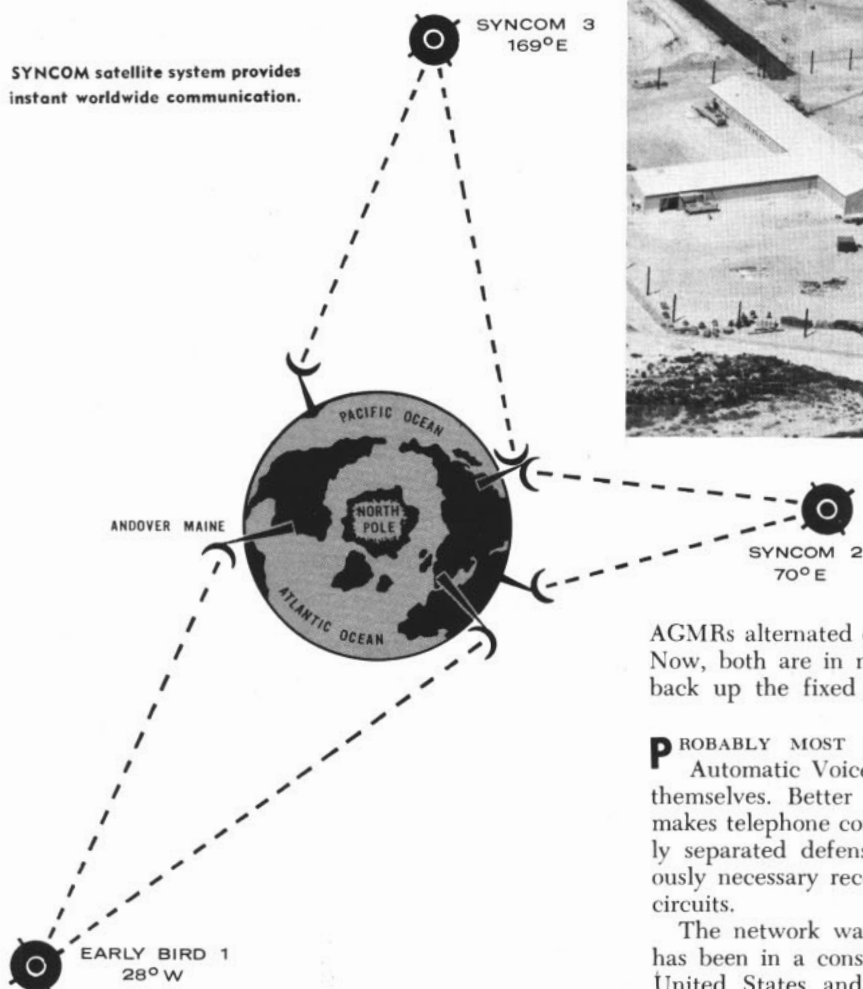
Although the role of the shore station in Southeast Asia has changed considerably, the first change noted aboard ship was the soaring message traffic.

If shipboard message centers were to handle it all, the communications facilities had to be improved and one of the more useful improvements of the 60s was the ability to handle several channels of communications at 100 words per minute. Before this development, afloat message centers were plodding along on only one 100-word per minute radioteletype-writer channel.

The multichannel broadcast conversion program for the Pacific was completed in 1966. The first multichannel broadcast for the Atlantic Fleet was activated in January 1968.

The complete changeover will make all Navy ships

SYNCOM satellite system provides instant worldwide communication.



Transmitter at Naval Communications Station Cam Ranh Bay is vital to Vietnam operations.

AGMRs alternated on station in the South China Sea. Now, both are in mothballs but they stand ready to back up the fixed shore systems whenever needed.

PROBABLY MOST NAVYMEN are familiar with the Automatic Voice Network and many have used it themselves. Better known as AUTOVON, the network makes telephone conversations possible between widely separated defense installations without the previously necessary recourse to commercial long distance circuits.

The network was begun in 1964 and, since then, has been in a constant state of expansion within the United States and, last year, switching stations in Hawaii, Europe, Panama and Guam were inaugurated.

As AUTOVON's users know, the network's circuits are limited even in the United States. Overseas trunk lines are even more limited and only certain persons may use them. All but the highest priority callers may have their message interrupted by a preempt signal which warns them to relinquish the line immediately.

AUTODIN is another network which is probably less familiar to most Navymen than AUTOVON. AUTODIN, which stands for Automatic Digital Network, was designed to transmit record data communications at speeds as high as 3000 words per minute. During the past 10 years, it has become a primary carrier of message traffic within the Defense Department.

The network is a computerized system linking defense facilities in Europe, the U. S. and Vietnam.

There are 20 automatic electronic switching centers (AESCs) in the worldwide AUTODIN network.

The AESC is something like a telephone switching center except that there are no telephone operators.

capable of receiving at least two teletype circuits on frequencies in use, with most ships able to handle at least four channels and larger ships having access to eight.

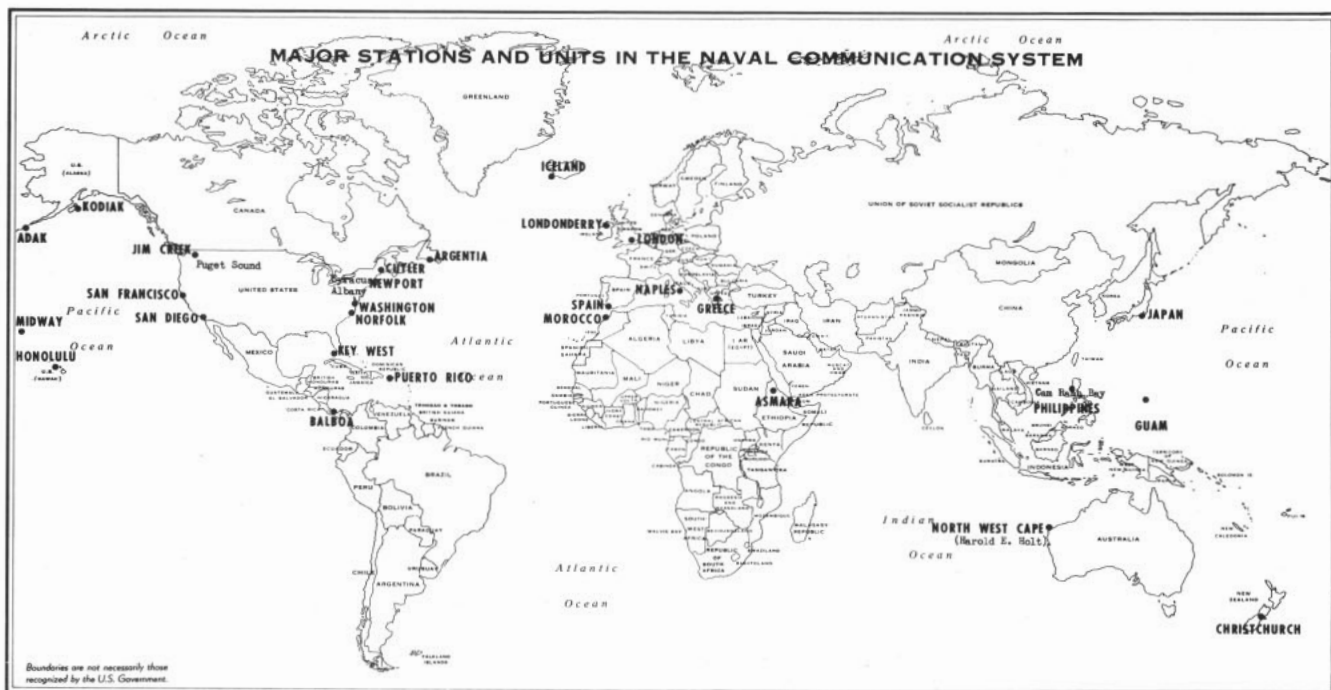
ALSO OF CONSIDERABLE IMPORTANCE aboard ship—the increased message traffic could be processed without a corresponding increase in transmitters, frequencies or receivers. In fact, almost no additional shipboard equipment was needed.

To supplement its chain of shore stations, the Navy use of major communication relay ships (AGMRs) had an impact, particularly in Southeast Asia.

The first such ship was *uss Annapolis* (AGMR 1) which had about 25 transmitters and 60 receivers to augment shore communications stations.

The second was *uss Arlington* (AGMR 2) which was larger and faster than *Annapolis* and had improved communications equipment and an extensive and specially designed antenna field.

Until both ships were retired recently, the two



Above: AUTODIN operations area at NCU Albany, N. Y.

Computer and data processing experts control two independent sets of computers in the center. The duplication is necessary in case of a breakdown.

This, to put it simply, is how an AUTODIN switching center works: A main computer called the Communications Data Processor (CDP) works with an Accumulation Distribution Unit (ADU) which receives and organizes messages, then feeds them to the CDP which checks message security level, corrects routing indicators and does other routine jobs. After the CDP has done its work, it returns the message to the ADU for proper forwarding.

This is done either by storing and forwarding the data or by direct user-to-user forwarding. Whichever method is used would depend upon traffic conditions at the time of transmission and the precedence of the message.

The Automatic Digital Network spreads over 21 states, the District of Columbia, the Canal Zone, Bermuda and Canada and is used not only by the armed forces but also by other organizations such as NATO agencies and the Red Cross. Information passed to

and from Vietnam passes through Hawaii and the Philippines.

The accuracy of the system is nothing less than astounding. It is about 99 per cent correct and, when one station alone processes from two to three million messages a month, that is pretty impressive.

THERE CAN BE NO DOUBT that naval communications have taken giant steps during the past decade. Although surefire predictions for the future are impossible, it would probably be safe to bet on an increase in satellite communications during the 70s.

The Navy's satellite communications began in 1954 when the first voice communication circuit was completed using the moon as a reflector. Since then, it has used the *Echo* and SYNCOM satellites for communications.

During the 60s, USNS *Kingsport* (T-AG 164) was accepted by the Military Sea Transport Service to become the world's first satellite communications ship. During the 70s many Navy ships may be equipped for satellite communications. At least that was the recommendation of a report forwarded to the Secretary of the Navy in 1969.

Lasers, too, might be in the Navy's immediate communication future. The laser was first announced in 1960 and, in telephone, television and data transmission, it may become a vehicle for progress during the 70s.

The idea of using light for communication transmission isn't new. Alexander Graham Bell transmitted a voice by light waves in 1880 and light beams have been used to imprint sounds as tracks on movie film to be reconverted into sound in the theatre.

Although the laser is still in its infancy, it is an exciting possibility and may prove comparable to the development of radio in the world of naval communications.

—Robert Neil



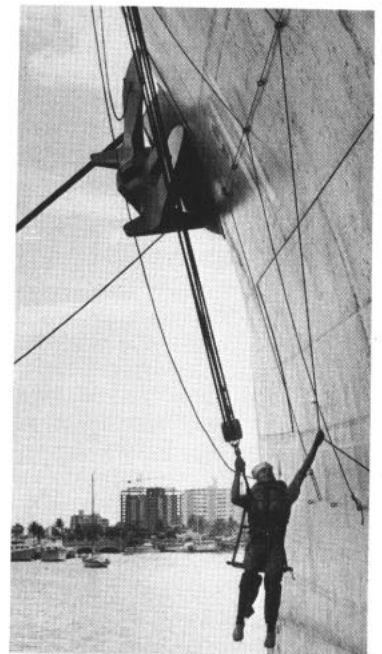
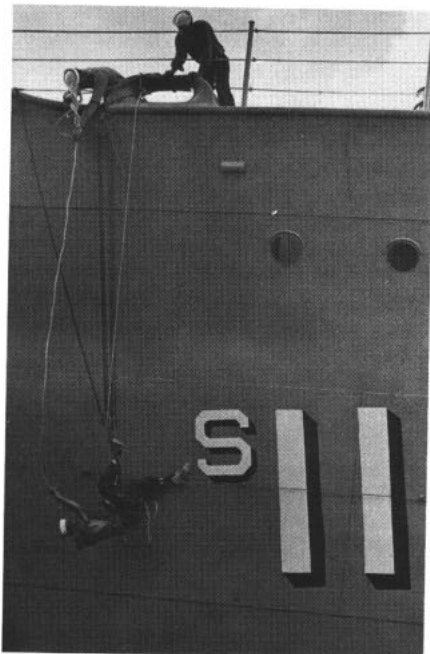
WATCH THAT NEXT STEP

IT DOESN'T MATTER how many machines there are in the Navy. Some jobs still require a man's hands.

One of those jobs is shown in these pictures by Chief Photographer's Mate Ralph Payne. A crewman is rigging hogging lines on the bow of *uss Fulton* (AS 11) while the submarine tender was anchored at San Juan. Hogging lines are used to hold collision mats or other objects close against a ship's side.

The pictures might give the impression of aerial acrobatics or a midair ballet. However, they simply show a Navyman doing his job — with grace and skill that no machine could ever match.

In a technological, automated, mechanized world, the Navy still depends on men like this.





FLAG PLOT

Located in the Pentagon is the Navy Department's command and control center. Here, information relating to the current readiness of our naval forces ashore and afloat is compiled and reported to the Secretary of the Navy, the Chief of Naval Operations, and their subordinates.

It's called Flag Plot.

This nerve center keeps CNO and senior officers on his staff abreast of the day-to-day happenings in the Naval Establishment.

Security is tight in, and around, Flag Plot. Marine sentries stand a 24-hour watch, allowing only civilian and military personnel with special passes to enter the secret spaces.

The key men in Flag Plot are the Duty Captains. Directing business during a standard eight-hour period, four captains take turns to oversee operations around the clock.

A battery of press, operation and intelligence briefers meet with CNO and his staff each morning, Monday through Friday.

Operations briefers present the current status of Fleet movements and readiness around the world. Intelligence briefers summarize and analyze reports from the operating forces. And press briefers bring into focus the news of the day as it relates to national and international Navy involvements.

CNO and his principal subordinates are briefed each morning in Flag Plot's 50-seat theater.

This theater provides a full range of briefing accommodations. Included are a graphic arts section that prepares illustrations and artwork, and a library in which all current operations orders and Navy Department plans are maintained for ready reference.

Not long ago, Flag Plot underwent a major refurbishment, its first in 11 years. Fresh coats of paint on the bulkheads and overhead, blue wall-to-wall carpeting, gleaming fluorescent light fixtures, and a more efficient floor plan that accentuates better acoustics, make the present Flag Plot a far cry from its previous makeup.

In addition, 10 paintings now hang in the access corridor to the plot room. They depict the history of the Navy through its ships and leaders.

One painting, an oil of Admiral Arleigh Burke by Seaman-Artist Orlando S. Lagman, has a place of honor among the other paintings on loan from the U. S. Naval Museum. The admiral organized the control center in 1958 while he was CNO.

The other paintings include oils of Captain John Paul Jones; *Old Ironsides*; and Admiral David G. Farragut, the Navy's first flag officer and leader of Union naval forces at the battles of New Orleans and Mobile.

Every six months, paintings such as these are rotated from the museum, bringing reflections of naval history into the space-age atmosphere of the Flag Plot operating area.

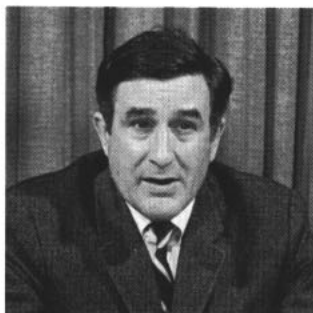
—JOC Ely U. Orias, USN



Captain Homer K. Cooley, USN, one of five Flag Plot duty captains, stands an eight-hour watch aided by sophisticated communications equipment.



At control center, staff of ship and aircraft movement report control go over the day's cabled messages from the Fleet.



Secretary of the Navy
John H. Chafee.



Chief of Naval Operations
Admiral Thomas H. Moorer, USN.



Flow of administrative traffic goes smoothly from Flag Plot yeomen and radiomen to various cognizant offices in OpNav via duty captain.



On the phones for the latest word from an overseas naval command are Flag Plot Duty Captain Homer K. Cooley (right) and his assistant, CDR Albert M. Hayes, Jr. Yeoman 2nd Class Harold Ellerson stands by ready to carry out administrative duties.



Oil painting is that of Admiral Arleigh Burke, USN (Ret), Chief of Naval Operations, who ordered the establishment of Flag Plot in 1959. At right are Rear Admiral Pierre N. Charbonnet, Jr., Director of Fleet Operations Division, and Captain William L. Adams, head of Flag Plot.

FILL'ER UP SAN PEDRO



Above: Ships line up at the San Pedro fuel pier to receive their cargoes of petroleum to transport to military facilities throughout the world. Left: An inspector visually checks two bottles of jet fuel for particle pollution.



IF YOU COULD transplant a shovel wielder of the old coal-burning Navy to the modern Navy's San Pedro Fuel Depot, he probably would think its operation was much too easy. After all, that's not the way they did it in the Old Navy.

The men at San Pedro, however, know their operation depends upon a highly developed technology which responds to the touch of a strong button-pushing finger and an occasional twist of a valve.

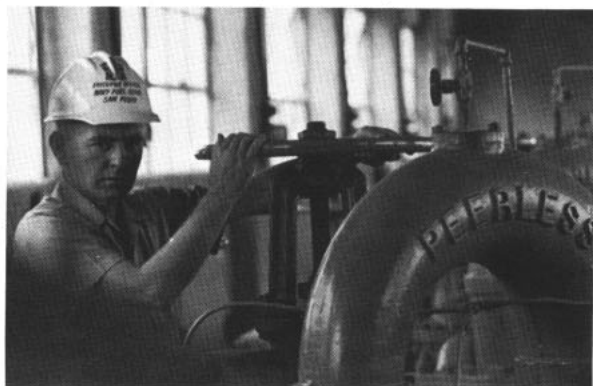
The San Pedro Depot is, according to its reckoning, the Navy's largest bulk petroleum fuel supplier on the Pacific Coast. Its products are quite likely to be found in almost any part of the world from a Marine's lantern in Vietnam to the fuel tanks of aircraft carriers and Navy jet planes.

More than one and one-half million barrels of all types of fuel can be stored at San Pedro and every drop of it is shipped to military users.



Pressing buttons sends thousands of barrels of petroleum on its way from underground storage tanks to the San Pedro fueling dock four and a half miles away.

For safety reasons some of the discharge valves are opened manually.



Most of the depot's products are stored in underground tanks, each of which has a capacity of 50,000 barrels. There are, however, three tanks above ground.

A pipeline labyrinth spreads throughout the Eleventh Naval District carrying petroleum products from suppliers throughout the district to the depot to be dispensed from there to military users, which include the other armed forces as well as the Navy.

THE OLD NAVY's coal passers would be surprised to learn that it requires only a pressed button or a turned valve at the depot to start thousands of gallons of black oil moving at 7000 barrels an hour.

Another button push will measure the oil level in any one of the depot's 26 tanks and give a reading on the temperature of the tanks' contents. Buttons, too, can open miles of pipeline, active pumping stations and cause fuel to flow into or out of the depot.

In addition to its storage facilities and pipelines,



A fuel inspector at San Pedro examines a vial of the Navy's black oil.

the depot has tank truck loading racks, a drum filling plant, drum storage area, a quality control program and laboratory and a Petroleum School for officers and enlisted men who handle petroleum products aboard ship.

The San Pedro Depot is also handling a new product, which eventually will replace the Navy's traditional black oil. It is a new distillate which will come into full use after the existing stockpiles of fuel have been exhausted and after the fuel pumps aboard Navy ships have been modified or replaced to accommodate the changes.

The modern equipment, new products, and can-do spirit of the Navy's San Pedro Fuel Depot insure the future petroleum support of our far-reaching fleet and armed forces wherever they might be deployed.

—Story and photos by
Chief Journalist Ernie Filtz, USN



Above: The Navy chief. Below: Two chiefs oversee refueling operations from the signal bridge of the guided missile destroyer USS Henry B. Wilson (DDG 7).

Right: The guided missile destroyer USS Henry B. Wilson (DDG 7). Below: The CO of USS Henry B. Wilson (DDG 7) talks with two of his CPOs. Below right: a chief hospital corpsman examines one of Wilson's crew in sick bay.



CHIEFS-

"NEXT TO ADMIRALS," says the legend, "it's the chiefs that run the Navy."

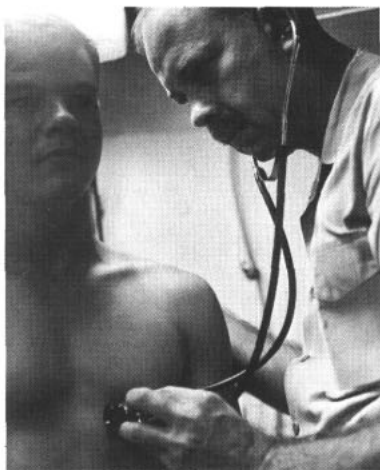
A visit to the guided missile destroyer *USS Henry B. Wilson* (DDG 7), operating off Vietnam, provides a chance to check the truth of the legend.

"I never cease to be amazed at how the chiefs go about solving the daily problems that come up," says the captain, Commander Henry C. Mustin, USN. He adds that many a junior officer is thankful for the introduction to shipboard routine offered by the CPOs.

CDR Mustin has plenty of evidence to demonstrate his point. There are 22 chief petty officers aboard his ship.

One of them, Chief Sonar Technician Morris H. Cunningham, is making his 18th cruise to the Western Pacific. He says he enlisted in September 1948 to see some of the places his father had described after serv-





watches in the demanding job of gun plotting officer.

When asked if his wife resented his going to sea, he replied: "When we got married I made it clear that I married the Navy first."

Chief Gunner's Mate Earl Williams is in charge of maintaining the 5-inch, rapid-fire guns that give *Wilson* her sting.

Once on the gunline something went wrong with the forward battery. Chief Williams went to work with a flashlight, examining every wire in the darkness of the gun's upper latch.

He searched painstakingly — then burst into his familiar grin and said, "There it is . . . a short." The gun was soon back in operation.

As a fellow chief put it, "When Chief Williams' 'toys' speak, the NVA listen."

Six days a week — and part of the seventh — Chief Storekeeper Miles O. Kirkup lives in a world of cata-

Backbone of the Navy

ing some 15 years in the U. S. Merchant Marine.

The chief says, "The Navy has a lot to offer today, particularly in education. On board we have a study program in U. S. history. The sailors get four hours of classroom instruction and the rest is correspondence. When they complete the course they will get three college credits."

In his 21-year career, the chief has taken advantage of Navy schooling himself. He attended Sonar Watchstanders' school, Career Appraisal Team school, Sonar Surface Maintenance school and Mark III Fire Control school. Ten of his Navy years were on one destroyer: *uss Agerholm* (DD 826).

CHIEF CUNNINGHAM, like many other CPOs on board, often performs duties normally assigned to junior officers. Although his main task is supervising the maintenance of the ship's sonar gear, he also stands

logues and requisition slips deep within the ship, keeping the ship supplied.

But Sunday on the mess decks he takes on another task: leading Protestant services as the ship's lay leader. With Bible and taped organ music, he sees to it that the spiritual needs of the crew are fulfilled, just as he sees to their physical needs the rest of the week.

Chief Hospital Corpsman H. E. Hart, respectfully known as "Doc" by his shipmates, likes *Wilson*.

"She rolls a lot, but I like this ship," he explains. "Of course, I wouldn't mind a little shore duty."

Chief Hart plans to retire in Ventura, Calif., where he owns a house. "I like to be active in civic affairs and the community," he says.

ANOTHER CPO who is devoted to *Wilson* is Chief Radarman Fred R. Brown, who served on board

CHIEFS- Backbone of the Navy

a few years ago, was transferred, and worked hard to get back aboard.

One of the youngest chiefs on the Seventh Fleet destroyer is Chief Fire Control Technician Fred N. Fraley, 27. He works with the ship's firing systems for the guns, antisubmarine weapons and surface-to-air guided missiles.

"I was lucky," he says, "and made The Hat (was advanced to CPO) the first time I went up." He proudly points out that he has only two hashmarks, while most chiefs wear three or more.

Five to 10 years younger than many of the other chiefs on board, bespectacled Chief Fraley looks more like a young mathematician than the old stereotype of a chief.

THE SHIP's main propulsion assistant, Senior Chief Boilerman Teddy Ross, Jr., is proud of his 24 years in the Navy and plans to go for 30. He can often be found on the bridge, advising the captain and executive officer.

Of the Navy training he has received, he says, "The career counseling school was one of the best. Not only did I learn recruiting, but I was instructed in helping Navymen with their career planning and problems like social security. If anything, the course helped me answer questions I had always wondered about myself."

Chief Ross is the ship's Career Counselor, besides overseeing the boilers and engines that move the ship.

As one of the privileges of command, CDR Mustin occasionally visits the CPO mess for a meal. After one lunch, he discussed problems and shared information with his hosts.

One of the subjects was the general morale and discipline of younger crewmen. "I've said this before," commented CDR Mustin, "but you chiefs have to do in one year what many parents couldn't do in 18."

On the bridge, it was mentioned that the captain got along with his chief petty officers.

An officer remarked, "The captain looks out for the chiefs." Replied a CPO, "Maybe that's because the chiefs look out for the captain."

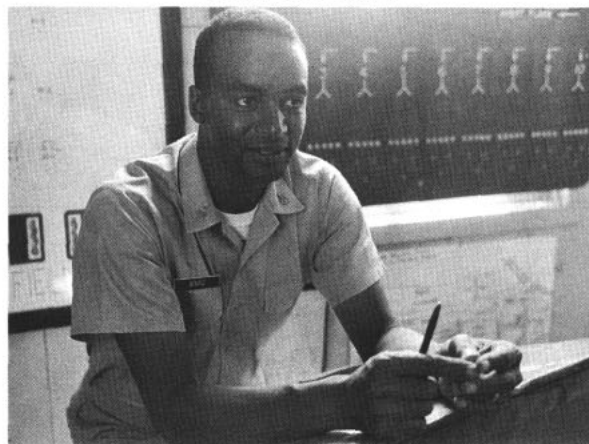
—Story and Photos by JOC Glenn H. Briggs

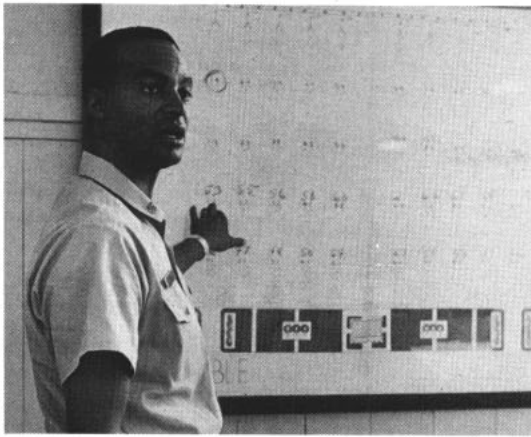


Chief Thomas E. Ward inspects men and equipment for the Color Guard.

DRILL CHIEF

Chief Ward, drillmaster, instructs the men selected for the Recruit Color Guard.





Chief Ward at the instruction board.

Chief Ward addresses the recruits.



Chief Ward talks with a sailor training for the Recruit Color Guard.



Color Guard recruits at parade rest.

A WINNING drill team is like a championship football team — each is a matter of careful coaching and selection.

Navy Chief Petty Officer Tom Ward handpicks each of the men on his recruit drill teams.

The U. S. Naval Recruit Training Command at San Diego accommodates 16 to 18 companies of 80 to 90 men at any time throughout the year. From these hundreds of recruits, the command drillmaster selects 93 for the Recruit Color Guard, the Drum and Bugle Corps, and the 50-State Flag Team.

Drill team candidates become eligible for Chief Ward's personal screening during their second week of training. He taps the top-talented 20 after a basic infantry inspection and close-order marching drill.

The stiff-necked, six-foot sailor shouts: "You men are part of your company — you will eat, sleep, and go to regular classes with your company." The rest of their time they belong to their drill chief.

The long hours of practice are hot, hard work — but the result is found in trophies of appreciation from local community functions and parades in fun-spots like Disneyland.

The drillmaster's men strut their stuff each Friday at the command's graduation ceremonies. Their leader, Chief Constructionman Thomas E. Ward, said: "I like this work. If I do my job right, I can see the result in my men."

—Story by Chief Journalist S. R. Moore, USN.

—Photos by Chief Photographer's Mate
C. R. Wright, USN.



Chief Ward reviews his men.

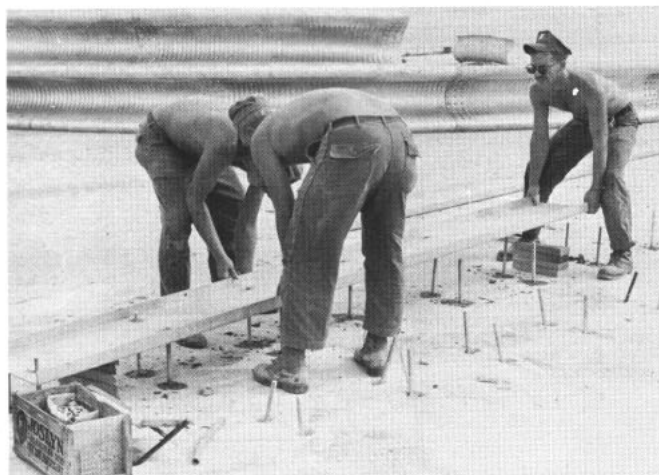


Photo left: A member of NMCB 8's bolt-up crew hoists himself up the side of an arch for final bolt-up. Above: NMCB 8 crew holds base channel to align recently grouted bolts.

Wonder

IN VIETNAM, ordinary rules don't apply.

For instance, assembling "Wonder Arches" — steel quonset-shaped aircraft shelters — is supposed to be a rather simple matter.

But Navy Mobile Construction Battalion 8 discovered that even erecting these prefabricated structures calls for considerable ingenuity—when you must work around an operating combat air group, on a sloping surface, with pieces damaged in shipping, and under the constant threat of enemy attack.

The arches, officially called Steel Arch Aircraft Shelters Type A, were first used for underground passageways and storage areas in Antarctica, because their construction enables them to support a large amount of snow. In Vietnam, they have been used to protect aircraft from the elements and the enemy.

MCB 8, the first Seabee group assigned to build Wonder Arches in Vietnam, had to put up 45 of the shelters at Da Nang.

First the battalion's crew chiefs visited Tan Son Nhut Air Base, where arches had been built previously, to study construction methods. Returning to Da Nang, they began assessing the problems.

THE SITE for the aircraft shelters was a crowned parking apron. The arches were to be built in rows, aligned at a 45-degree angle to the adjacent runway to provide for defense against incoming rockets and mortar hits.

The positioning — at an angle to the crown of the surface — made it necessary to build an approximately level base for each shelter before it could be erected.

The presence of a Marine air group, required to keep tactical aircraft operating 24 hours a day, caused more problems. The work area would have to be kept unusually clean, free of debris which could be sucked into jet intakes and damage the engines. Access ways had to be left open for movement of planes, equipment and materials.

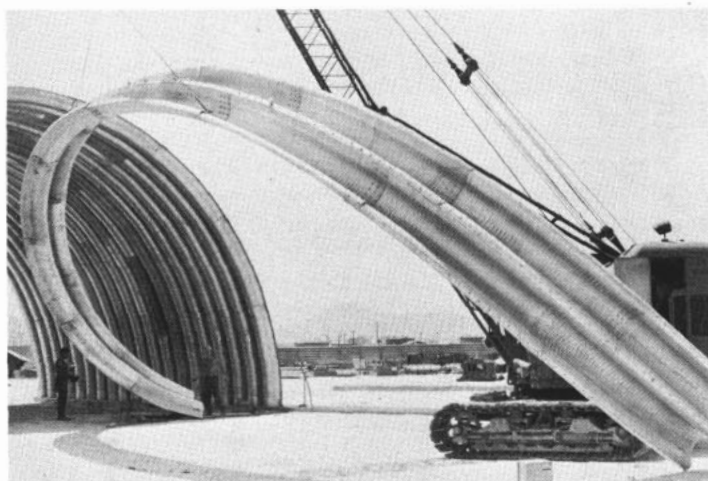
But the biggest problem was deciding how many men would work on each phase of the operation, to keep assembly-line construction moving smoothly. If not enough men were assigned to one step — laying foundation curbs, for instance — it would slow down the work of all the other crews.

Finally the crews were formed and construction began.

THE SHELTERS are formed from 34 two-foot-wide arches, each made of nine steel panels bolted together. The bases of the arches are secured to steel base channels, which are attached to bolts set in the concrete.

The first problem was setting the base channels level on a not-quite-level surface.

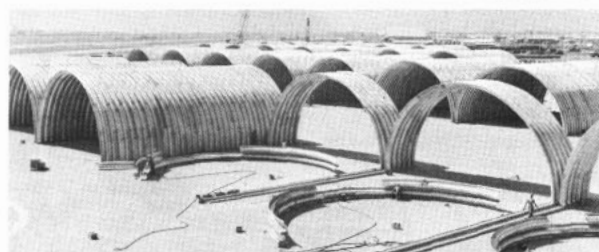
The channels were laid out in position. Spray paint marked the locations of the bolt holes. The channels



Above: A two-arch assembly is lifted into place for preliminary bolt-up. Above right: Two distorted steel panels are assembled. Below right: A portion of the completed arches and some that are still under construction.



Arch



were removed, holes drilled in the concrete, and bolts set in grout in the holes.

With the aid of a transit, the Seabees screwed nuts down on the anchor bolts until the nuts were in a level line. They built forms as wide as the base channels around the bolts, poured concrete into the forms and leveled it off at the height of the nuts.

The result was a curbing with the top level.

When it had cured, the men removed the nuts and used them to anchor the base channels. Now the next crew was ready to put up the arches.

However, the arch panels weren't easy to put together. Though the manufacturer had packaged them to prevent damage, most of the panels had become bent or deformed somewhere in transit from the States to Da Nang.

The pre-drilled bolt holes in any pair of panels seldom lined up without liberal use of drift pins supplied by the manufacturer. The pins bent and cracked from strain. MCB 8 made new ones of stainless steel, which proved more durable.

The heavy demands on the impact wrenches caused them to break down, too—so often that one man was assigned full-time to repair power tools.

With difficulty, the panels were bolted together into sets of two arches, then lifted into place by crane, secured to the base channels, and bolted to the previously erected arches.

THE LAST ITEM raised more problems. The tropical climate caused the rope ladders, supplied by the factory, to deteriorate quickly.

After some experiments, the Seabees came up with a Navy solution: a bosn's chair with safety belt, suspended by a line attached to a ring at the top of the structure. A bolt-up man working in the chair could reach several panels by simple use of a block and tackle before he had to move the suspension system.

But then there was the rain. It presented many problems — aside from helping to rot the rope ladders. MCB 8 met them.

Since electric impact wrenches would have made a shock hazard, the Seabees used pneumatic wrenches. Brake drums on forklifts and cranes were kept dry (as much as possible) with polyethylene sheets. Extra safety harnesses protected men working on wet structures. It still wasn't easy to hold onto wet tools and materials.

Obviously, the manufacturer hadn't had Vietnam in mind when he wrote the instructions for building Wonder Arches. MCB 8 took 78 man-days to build a shelter, considerably more than the 40 man-days the book suggested.

The conditions were hardly ideal. But the Seabees proved again that they get the job done.

—Story by LT J. G. Ariko, Jr., and JO3 M. L. Peterson

—Photos by PH2 R. F. Cotter

WHEN William A. Watkins picked up a pair of degrees and an ensign's stripe at Purdue University this year, he joined one of the most exclusive military or academic clubs around.

Ensign Watkins and two other graduate students at Purdue — ENS Larry A. Lukens and ENS Robert J. Giannaris — are the first three graduates of the Navy Enlisted Scientific Education Program (NESEP) to gain approval to continue their work toward Ph.D. degrees.

They haven't done badly—in fact, their record represents quite an achievement for men who enlisted in the Navy just a decade ago.

All three expect to complete their engineering doctorates within the next two years, and hope to win assignments in labs of the Office of Naval Research.

Since its beginning, NESEP has basically been a program of undergraduate study for outstanding petty officers, leading to a bachelor's degree and a commission in the unrestricted line. This has continued to be its major purpose as NESEP units have been set up on 22 university campuses.

However, about 15 or 20 per cent of NESEP graduates go on to advanced degrees, as the Navy decides that more study will help the new officers to become better qualified.

Now Ensigns Watkins, Lukens and Giannaris have made the high-level breakthrough to doctorates.

Lukens and Giannaris are working together in plasma gas dynamics research, both aiming for doctorates in mechanical engineering. Watkins, who won

both bachelor's and master's degrees in materials science in January, is beginning research in surface phenomena in thin films, especially as used in electronics circuitry.

NONE OF THE THREE might have seemed likely to reach even the baccalaureate level when they joined the Navy.

Lukens said, "My first two years at Purdue, (1957-59) in mathematics, were a disaster." He finally enlisted in 1961. Giannaris tried a few junior college courses, but dropped out and enlisted in 1959. Watkins said his high school record couldn't have helped him win a NESEP appointment.

What made them change their minds and become good students? Lukens says, "More maturity and motivation can help qualify men with poor previous records."

Lukens had spent much of his service in Navy electronics and nuclear power schools before he entered NESEP in 1964.

A year later, Giannaris arrived at Purdue. He had had submarine duty, then studied and later taught at the Navy's Nuclear Power Training Unit at Windsor, Conn. He served as radiochemist during construction and initial trials of the nuclear submarine *USS Ulysses S. Grant* (SSBN 631) just before winning his NESEP assignment.

"With a family of five kids, I'd never have had a ghost of a chance of getting back to college if it

At Purdue

NESEP

A Higher and Higher Education



First NESEP Ph.D. candidates: Lukens, Watkins and Giannaris.

hadn't been for the Navy and NESEP," he said.

Watkins was an electronics technician aboard a destroyer before entering NESEP in 1965, but he decided to go into metallurgy and materials science "because I wanted to go into a new field that was blossoming and expanding."

His doctoral work will include both electrical and metallurgical engineering.

THE NAVY is highly selective in screening NESEP applicants. A man who joins the program must be 20 to 23 years old, a PO3 or above on active duty, a U. S. citizen, a high school graduate (or, in some cases, holder of a GED equivalent), with a GCT/ARI score of 115 or better.

Waivers of the upper age limit may be given on the basis of one year overage for each transferable year of college credits the man has already earned.

The NESEP selection board uses mathematical aptitude tests and interviews in screening the 900-1000 men who apply each year. Fewer than half the applicants make it through the selection process, which includes a 10-week preparatory school at Bainbridge, Md., or San Diego.

The program is even more selective than some high-rated universities. In a recent verbal and math aptitude test given to NESEP prep students at Bainbridge, the Navymen made an average score of 1223. The average for all entering freshman engineering students at Purdue was 1150.

Students accepted for NESEP are given up to four years of uninterrupted education at one of the 22 universities in the program. After completing all requirements, including 10 weeks of OCS in the summer before their senior year, they earn a baccalaureate degree in one of 18 major fields in science, math or engineering and are commissioned ensigns in the Regular Navy.

(Readers who are interested in applying may find details on NESEP in BuPers Inst. 1510.60 series.)

SOME STUDENTS WITH EXCEPTIONAL records are allowed to take advanced work prior to accepting a commission.

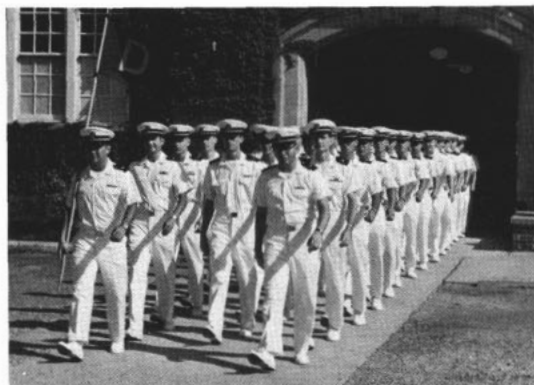
Evidently Ensigns Lukens, Giannaris and Watkins qualify as exceptional. All are members of Tau Beta Pi engineering honor society. The three have also been accepted in honor societies in their specialties—Lukens and Giannaris as members of Pi Tau Sigma for mechanical engineering, and Watkins in Alpha Sigma Mu for metallurgical engineering.

NESEP is designed to provide unrestricted line officers for the Navy. However, because of their special qualifications, the three doctoral students hold commissions as engineering duty officers.

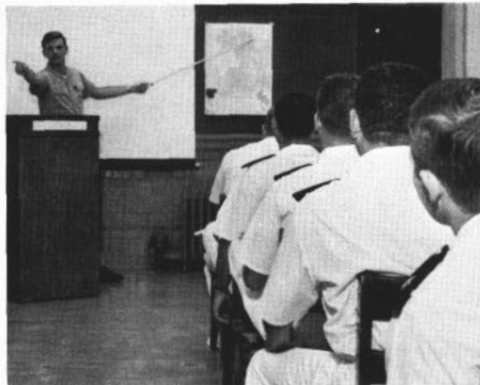
ENS Watkins hopes to do research in the Navy electronics laboratory in San Diego after he finishes his Ph.D. in 1972. Ensigns Lukens and Giannaris will probably request assignment to the Navy plasma lab in Washington when they receive their doctorates next year.

All are obligated for at least six years of naval service after gaining their advanced degrees. Said ENS Lukens:

"I can serve best by developing my capabilities to the fullest and then using them in the best interests of the U. S. Navy."



Purdue NESEP students march from armory for drills.



Lieutenant teaches prospective officers' class.



NESEP men take exam.

Candidates become familiar with pistol.



In Purdue's NESEP lounge, students relax from classes.



IF THE NAVY'S Associate Degree Completion Program (ADCOP) were a stock listed on the exchange, brokers might describe its favorable growth rate in glowing terms. Less than four years ago, the program started with 75 students and today it has more than 475.

As a stock, ADCOP would also have a favorable potential for it is the Navy's goal that every career-oriented petty officer have an associate degree.

New schools are being added, too. Last year, for example, those participating in the program included the Pensacola Junior College at Pensacola, Fla., Palomar College at San Marcos, Calif., and Mt. San Antonio College at Walnut, Calif.

This year, a new institution was added—Del Mar College at Corpus Christi, Tex.

The students at Del Mar are typical of those at other ADCOP campuses. They wear their uniforms only once a week but, civilian clothing notwithstanding, they are distinguishable from their classmates.

Their brisk walk and squared-away appearance, for example, might tell even a casual observer that these men are no ordinary students.

THE MATURITY of the ADCOP student is also evident. Those at Del Mar average 29 years of age, which is typical of petty officers who meet the ADCOP entrance requirements.

Second class petty officers (or higher) who have had at least five years of continuous active Navy duty under their belts are bound to have more savoir faire than most other students.

Like all ADCOP men, those at Corpus Christi's Del Mar attend college full time at government expense.

A Sampling of ADCOP at Del Mar College

The Navy pays all their required educational expenses including tuition, application and registration fees and textbooks. While the ADCOP students are going to school, they continue to receive their full Navy pay and allowances.

Campus life for the Navy student is not much more circumscribed than the lives of civilian students. Actually, the difference lies mainly in their no-nonsense approach to education.

ADCOP students aren't excused if they cut class, and infractions of either the college's social or academic code could exclude the student from the program.

During their first semester at Del Mar, two ADCOP men, Charles Webster and Pete Generao, were elected to the student senate. Both are also members of and officeholders in other campus organizations.

PETTY OFFICERS Webster and Generao are typical of many of the students who entered ADCOP and who have made a place for themselves in campus governmental organizations, clubs and honor societies.

Although Pete Generao is representative of the on-campus ADCOP student, his previous academic experience is somewhat atypical. Before he became an ADCOP



business administration major and a sophomore at Del Mar, Petty Officer Generao had attended university in his native Republic of the Philippines between 1953 and 1955 and had majored in foreign service at San Beda College from 1955 to 1957. Other academic experience included courses at the University of Hawaii and a law correspondence course from La Salle University at Chicago. At Del Mar, Generao studies accounting, government, economics, business and history.

Like most ADCOP students at Del Mar, both Petty Officers Generao and Webster enrolled for the stand-

ard 15-semester-hour load. The courses chosen by ADCOP students are selected to improve their professional proficiency and to develop their leadership ability through emphasizing management, effective supervision, human relations and quality control.

The benefits of the Associate Degree Completion Program are about evenly divided between the Navy and the enlisted man who takes part in the program.

FOR THE NAVY, the Associate Degree Completion Program is a career benefit for career petty officers. It expects the program to increase the profes-

can advance in rate as he would otherwise do.

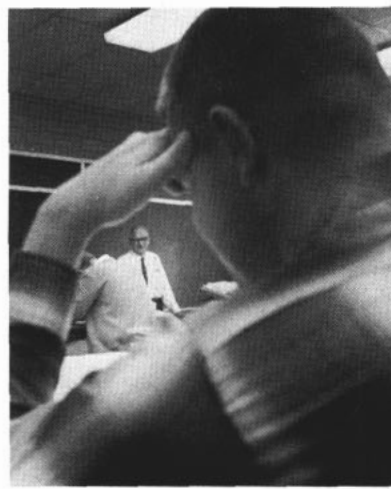
Insofar as Seavey/Shorvey is concerned, the ADCOP student is serving neutral time.

NAVY students at Del Mar, like those at other ADCOP campuses, have a great deal going for them. In fact, the Associate Degree Completion Program approaches getting something for nothing, for the price tag attached is only a service obligation. Inasmuch as ADCOP students are career petty officers anyway, the price is almost nonexistent.

After ADCOP students graduate from junior college,



ADCOP students at Del Mar join in bull sessions at the student center, attend classes in history, electronics and architectural technology—and stand personnel inspections given by CDR C. P. Smith, training department head.



sional proficiency of these men through vocational training at civilian institutions.

For the Navyman, ADCOP offers the associate degree absolutely free. The Navy picks up the tab—all of it. As mentioned before, there are no incidental fees, book costs or other expenses with which the student is faced.

While he is spending up to two years as a college student, an ADCOP man loses none of his Navy benefits, except that he cannot draw pro pay. His pay and allowances continue; he is eligible for all the fringe benefits to which other Navymen are entitled; and he

they are assigned duties which are consistent with their past assignments and previous training.

ADCOP students can reasonably expect their enlisted careers to be advanced through their studies and, as associate degree holders, they have a credential that is fully recognized in the civilian community.

APPPLICANTS for the Associate Degree Completion Program (ADCOP) can find step-by-step details on how to apply in BuPers Inst 1510.107A. Meanwhile, if you meet the following basic eligibility requirements, consider yourself a prospective candidate.

Broad Academic Program

Del Mar College is a tax-supported community college which provides the first two years of fully accredited academic and professional courses leading to college degrees.

Del Mar's academic program is similar to that of the first two years of any traditional college, but it also includes other programs which differ greatly from the offerings of traditional junior and senior colleges.

Since 1935, Del Mar College has grown from an institution having 154 students to one which serves more than 14,000 students a year. It has two campuses: The main campus is located in a residential area of Corpus Christi and the smaller Del Mar Tech Campus is near the edge of the city.

- You must be a petty officer 2nd class or higher in the Regular Navy, serving in your second or subsequent USN enlistment. More specifically, you must have completed at least five years of continuous active naval service as of 1 September of the year in which your attendance at an ADCOP college would commence.

- You must be a high school graduate or show evidence of having completed three years of actual attendance at a high school and possess a GED equivalency certificate or diploma issued by a state department of education or an authorized high school. The average score for all test areas must be in the top half.

- There is also the alternative of having completed

three units of high school English (with at least a C) and two units of high school mathematics including algebra and geometry. You must also have completed six semester hours of college level work in English or mathematics (or a combination of the two). In addition, you must have a GED certificate or diploma with test scores equal to those mentioned above.

ON THE EXPERIENCE SIDE of the ledger, you are expected to have achieved one of the following ADCOP requirements:

- Be a graduate of Navy Class "A" and "B" Schools; or

- Have at least 12 transferable college credits from a regionally accredited institution or through such accredited programs as PACE, USAFI, Tuition Aid, etc; or

- Have a combination of Navy Class "A", "B" or "C" Schools totaling at least 24 weeks of classroom training; or

- Be a graduate of a Navy Class "A" School or Class "B" School and have in addition at least six transferable college credits; or

- If you are in a rating which offers no "A" or "B" Schools, but have passed the general examinations of the College Level Examination Program (CLEP) with an average score for all the test areas in the upper 50th percentile and have at least six transferable college credits from a regionally accredited institution.

Other requirements rest mainly in the areas of past performance and future service obligation.

How to Compute Seavey/Shorvey Status of ADCOP Navymen

HERE ARE A FEW TIPS on how to figure the Seavey/Shorvey status of Navymen who complete ADCOP instruction:

Students who enroll in the Associate Degree Completion Program can compute their return to sea duty by adding the combined period of ADCOP instruction and previous neutral time to the sea duty commencement date established before they reported to duty. Time spent as an ADCOP student is counted as neutral time.

A student who reported to ADCOP from sea duty would add the number of months of ADCOP instruction to his original sea duty commencement date and be returned to sea with an adjusted sea duty completion date.

Navymen who reported to ADCOP instruction from a normal tour of shore duty can determine whether they will have sea or shore duty after completing their studies by using the following method of computation:

Subtract the entire period serving ashore before reporting to ADCOP (as well as the time spent during instruction) from the length of shore tour established by the shore station served at immediately before ADCOP instruction.

If 14 months or more remain, the individual will be retained ashore for completion of a normal shore tour. If less than 14 months remain of a normal shore tour, one of the following will apply:

- When the combined period served ashore is less than 24 months, add it to the previously established sea duty commencement date and return to sea duty.

- When the combined period served ashore is 24 months or more, credit it as a normal tour of shore duty and return to sea duty.

Navymen who reported to ADCOP training from a "for duty" tour ashore should credit as shore duty the period served before reporting for ADCOP as well as the instruction itself and return to sea duty.

"Bac Si"

IN THE MEKONG Delta of the Republic of Vietnam there are magic words which all Vietnamese know and use. They are: "Bac Si." Bac Si is the Vietnamese word for doctor or corpsman.

At Binh Thuy and Can Tho the magic words are: Bac Si Spence or Back Si Mattison. Doctor Clarence H. Spence, MC, USN, and Doctor Charles A. Mattison, DC, USN, to be exact. These two words mean alleviation of suffering and illness in the Can Tho/Binh Thuy area, especially at the "Mother of the Sky" orphanage located just outside Can Tho.

Once a week, Navy Doctors Spence and Mattison and five hospital corpsmen visit the orphanage to hold a MEDCAP (Medical Civic Action Program) for the five nuns and 250 children who either live at the orphanage or attend the nine grades of school taught there.

Upon arrival, the team sets up shop in the classrooms or outside under the trees, and begins to work its magic. From past experience each man knows what to do; they work quickly and efficiently, dispensing medicine as well as goodwill to their young patients.

Unlike children in the United States, the children of the orphanage await the arrival of the doctors and the corpsmen with great expectation, rather than fearful anticipation.

AFTER THE TEAM has treated all of the children, it is repaid for its help with a brief period of relaxation and usually a cold drink, compliments of the Sisters, before heading back to care for the ills of the men stationed at Binh Thuy Navy Base.

This one day, however, is not the only time that the doctors and corpsmen see the children at the orphanage or the Vietnamese people.

Vietnamese "sick call" is held every morning at 10 o'clock for the children that need immediate attention and the Vietnamese civilians employed by the Navy.

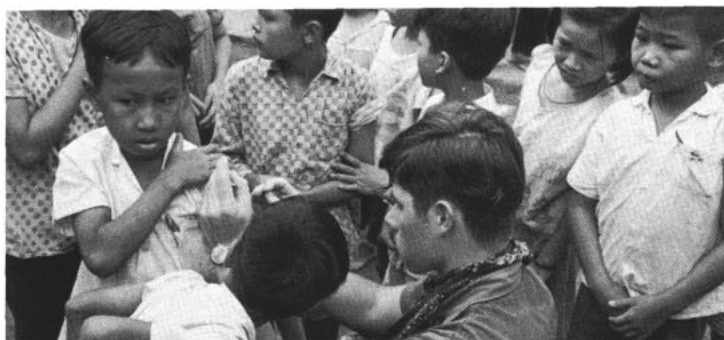
Every morning at 10 o'clock the waiting room at the dispensary is full of Vietnamese with various complaints and illnesses which are treated by the corpsmen and doctors. Dr. Spence has also under-

taken the training of three Vietnamese Navy corpsmen.

The corpsmen and doctors of Naval Support Activity Detachment, Binh Thuy, are fighting a war against disease in Vietnam. To the Vietnamese people involved in it, the magic words for winning this war are: Bac Si.

—Story by JO3 J. Schmidt

—Photos by PH2 J. Hoehne



A hospitalman administers vaccinations to curtail the spread of disease.



A Vietnamese girl is checked for throat disorders.



Dr. Spence checks a boy for respiratory ailments.



Dr. Mattison attends to some of the children's dental problems.

THE LITTLE WHITE FLEET

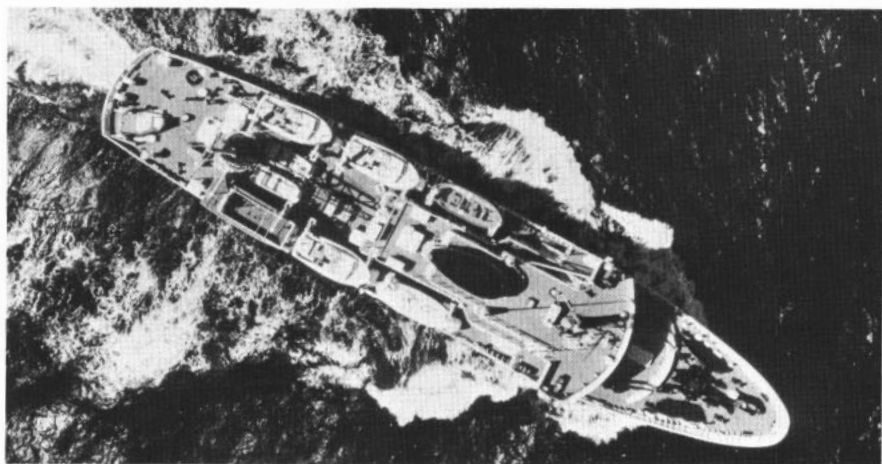
THE GLEAMING WHITE ships can be seen in all portions of the globe. At home they roam up and down the coasts of the United States and in its bays and estuaries. Abroad, their missions take them to far-off climes, to the sun-drenched islands of the South Pacific, to the frigid wastes of the Arctic, to the steaming waters off the coasts of Africa.

Sometimes they are mistaken for ships of the U. S. Navy, although it is years since Navy ships were painted white (except for the ships of the Middle East Force); at other times, they may be taken for Coast Guard vessels. They are neither. They belong to the Coast and Geodetic Survey, the government's oldest scientific agency, with a history dating back to 1807 when Thomas Jefferson was President.

The Coast and Geodetic Survey fleet consists of only 14 vessels, but, to paraphrase the words of a famous Englishman, never has a nation owed so much to so few, for without them America's shipping would stand the risk (literally) of going on the rocks.

Things were bad back in Thomas Jefferson's day. Ships kept piling up on stormy shores with disheartening regularity. That's why the Coast and Geodetic Survey was born. Today modern Coast Survey nautical charts enable mariners to sail their ships with comparative safety anywhere along the coasts of the United States.

OF THE approximately 2.8 million nautical charts distributed annually by the Coast Survey, about



Above: An aerial view of USC&GSS Fairweather. Left: The ocean survey ship USC&GSS Discover.

1.7 million are used by the Navy. The approximately 850 different charts are the end products of the work begun by those Coast Survey vessels that conduct hydrographic surveys along the Atlantic, Gulf and Pacific coasts, the Hawaiian Islands, Puerto Rico, Virgin Islands, and Alaska. In addition to vessels, there are two land-based survey parties which employ launches for work in protected waters where it would not be feasible to use the ships.

The vessels' officers are members of the commissioned corps of the Environmental Science Services Administration, parent body of the Coast Survey in the U. S. Department of Commerce. The corps is the smallest of the nation's seven uniformed services, consisting of an authorized strength of 330 officers. All are college graduates, with engineering and scientific backgrounds.

The ESSA commissioned officer corps began in the Coast and Geodetic Survey in 1917 during World War I. With the creation of ESSA in 1965, the commissioned corps became an arm of the new agency. Officers spend approximately one-third of their careers aboard Coast Survey ships, where the corps fashions much of the esprit for which it has been noted during its 53 years of existence, both in peace and in war.

During war, they are subject to military duty. Over a 30-year period, officers can expect approximately nine years' sea duty, with good prospects of early command of small hydrographic vessels and eventual command of major survey ships. Experience at sea or knowledge of it is not a prerequisite for appointment as an officer with ESSA, but an affinity for the sea is necessary to the successful officer.

IN ADDITION TO service aboard Coast Survey vessels, ESSA commissioned officers are assigned to mobile geodetic and photogrammetric survey parties, geophysical observatories, or other field facilities, or to a laboratory or technical office at ESSA headquarters in Rockville, Md., near the Nation's capital.

ESSA officers have ample opportunity to develop their talents. Pilot training at military flight schools and subsequent assignment to flying duties with photogrammetric, atmospheric research, and other missions are available to some officers, and scuba diving training is furnished to others. Officers wear a uniform similar to that of Navy personnel and pay and special benefits correspond in general to those in sister services.

The Coast Survey fleet consists of four types of ships:

- The hydrographic survey vessels *Pathfinder*, *Whiting*, *Fairweather*, *Rainier*, *Mt Mitchell*, *McArthur*, *Davidson* and *Peirce*;

- The ocean survey vessels *Oceanographer*, *Discoverer* and *Surveyor*, which conduct studies of the deep ocean and sea bottoms;

- Rude* and *Heck*, the wire drag ships, the only ones of their kind in the United States, which search out underwater navigational hazards along the coasts, such as wrecks, pinnacle rocks, abandoned oil platforms, and pilings (incidentally, *Rude* and *Heck* are



The 90-foot wire drag ship USC&GSS *Rude*.

not what they sound like — they are named for officers who distinguished themselves in the U. S. Coast and Geodetic Survey); and

- A current survey vessel, *Ferrel*, designed specifically to measure coastal and estuarine currents.

Researcher, an ocean survey ship, is under construction.

THE SHIPS vary in size from the trim 90-foot, 214-ton (displacement) *Rude* (pronounced Rudie) and *Heck* to the sleek 303-foot, 3959-ton sister ships *Oceanographer* and *Discoverer*, nicknamed the *Oceo* and *Disco*. In between are the 133-foot, 363-ton *Ferrel*; the 162-foot, 760-ton *Whiting* and *Peirce* (pronounced Purse); the 175-foot, 995-ton *McArthur* and *Davidson*; the 231-foot, 1798-ton *Fairweather*, *Rainier* and *Mt Mitchell*; the 229-foot, 2000-ton *Pathfinder*; and the 292-foot, 3150-ton *Surveyor*. *Researcher*, slated for commissioning in 1970, will be 278 feet long, with a displacement of 2800 tons.

With one exception, the entire fleet is approximately ten years old, or less, as most of the older vessels have been replaced since 1960.

Surveyor was delivered in 1960; *Peirce* and *Whiting* in 1963; *Oceanographer*, *Discoverer*, *McArthur*, *Davidson*, *Rude* and *Heck* in 1966; *Mt Mitchell* in 1967; and *Ferrel*, *Rainier*, and *Fairweather* in 1968.

The 303-foot ocean survey ship USC&GSS *Oceanographer*.





USC&GSS Surveyor.

Pathfinder was built in 1942 and, except for *Pathfinder*, all are air-conditioned.

(*Rude* is named for Captain G. T. Rude, C&GS inventor of the circular star identifier familiar to all naval personnel concerned with shipboard navigation.)

OCEO AND DISCO are among the nation's most modern oceanographic floating laboratories. At the time they were built they were the largest and most



An artist's conception of USC&GSS Researcher, which is under construction.

completely automated research ships in the country.

Three years in construction, each cost approximately \$10,000,000, including some \$1,000,000 worth of electronic equipment. The ships can be provisioned for 150 days at sea and have a cruising range of 15,200 miles. They carry a normal complement of 15 officers, 62 crew members and 11 technical and scientific personnel, with additional accommodations for up to 17 visiting scientists, including women.

Each ship has over 4100 square feet of laboratory space. Closed circuit television is provided throughout the machinery spaces, where a centralized engine room control (CERC) system provides remote starting and stopping of machinery, and the automatic recording of operating data at a master control station.

A single computer serves both ship operation and the collection and processing of environmental data.

Using this computer, the propulsion and other machinery is automated through CERC. The CERC system also permits remote control of main propulsion units and principal auxiliary machinery from a master control station in the engine room and from the bridge.

In addition to automatic logging of ship operating data, CERC includes an alarm system which detects and locates malfunctions, gives a warning signal, and types out a description of the problem.

The ships are the first American oceanographic survey vessels to employ this concept of centralized engine room control. When fully developed in future years, this concept will permit a single operator to monitor and control a ship's engineering plant from a central control station.

THE HEART of the automated controls is also a computer.

Because controlling and monitoring ship operations require only about 25 per cent of the computer's total capacity the computer is used principally by the Data Acquisition System.

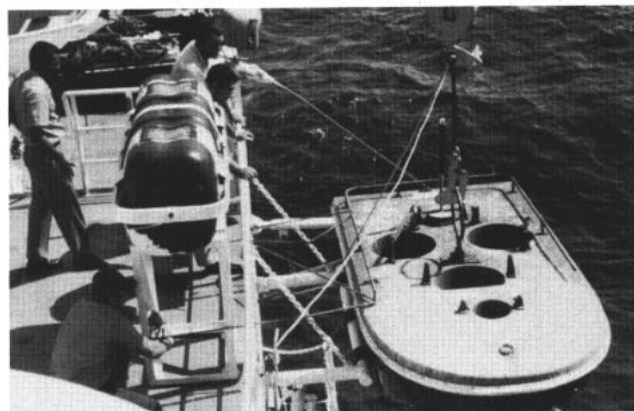
When the ship is underway, the DAS samples (via shipboard and towed sensors), records, and processes geological, geophysical, oceanographic, hydrographic, and meteorological data on a routine basis; ship position is logged continuously; and the computer can be used for concurrent processing of non-routine data.

When the ship is stationary, the DAS samples and processes data sensed by shipboard instruments and by an underwater multisensor package, along with its handling of oceanographic data. The automatic data processing system frees many specialists from the routine task of sorting and analyzing a great amount of data, a task which usually consumed months of painstaking effort.

The equipment measures and records a ship's course and speed, magnetic field intensity, gravity, surface current and temperature, temperature at depth, and ocean depth.

Sub-bottom profiles can be taken while the ship is underway and show the structure of the ocean floor beneath its bottom sediment. The ship takes water samples at various depths and is equipped to obtain 100-foot core samples from the deepest ocean floor.

The crew of USC&GSS Ferrel put a buoy over the side.



Meteorological data are gathered at regular intervals by ship-launched sounding balloons. Data and samples are studied and analyzed in the ship's laboratories.

THE SHIPS can operate equally well in any area of the global sea, including polar waters.

A special control feature—a bow thruster of 400 horsepower—enables the vessels to maintain a nearly constant heading when the ships are on station despite wind and wave conditions. The bow thruster is an underwater duct fitted with a reversible propeller that thrusts a water jet to either side as desired.

The ships can take samples anywhere in the world. Over 22 miles of wire line are carried on each vessel for oceanographic work. One continuous length of wire is over seven nautical miles long. The wires are reeled in by hydraulic winches.

Another unusual feature is a 6-by-8-foot well near the center of the ship which enables special experimental equipment to be lowered and scuba divers to enter and leave the vessel. An elevator carries the



The hydrographic survey vessel Peirce.

equipment and men directly from the oceanographic laboratory into the water 35 feet below.

Six special glass-covered ports near the bow and stern, about 15 feet below the water's surface, permit scientists to view underwater life and formations from within the ship.

The ships have an ample supply of fresh water. Normal consumption for all purposes is approximately 5000 gallons per day, with a storage capacity of about 27,000 gallons and a seawater distillery capacity of 8000 gallons a day.

THE VESSELS have extensive communication facilities. These include radiotelephones, emergency receivers and transmitters, mobile transceivers, portable radiotelephones, facsimile equipment, standard frequency broadcast service, portable lifeboat transmitter receiver, and radio teletype.

An anti-rolling device (a passive rolling tank) enables the ships to conduct continuous operations, except in unusually heavy weather.

A notable feature is the conning tower, an enclosed crow's nest, on top of the bridge approximately 60 feet above the water. It is reached by an inside ladder.



USC&GSS Whiting.

In addition to affording a commanding view of the sea, the ships can also be fully controlled from the conning tower. From this control station, they can be kept on a steady course whenever delicate instruments are being trailed over the sides or from the stern.

Similar, but less elaborate, controls on the deck on each side of the bridge enable similar control to be maintained from these stations.

Ample storage facilities, including cold storage, enable scientists to bring home samples of their findings in their original organic state for further studies in laboratories ashore.

THE CAPABILITIES of the other ships are commensurate with the nature of their assignments, whether it is mapping the bottom of the North Pacific, a major task of *Surveyor* and *Oceanographer*, or engaging in hydrographic and bathymetric surveys of the coasts, as do *Fairweather*, *Rainier*, *Mt Mitchell*, *Peirce*, *Whiting*, *McArthur*, *Davidson* and *Pathfinder*. These ships have a range of 4500 to 13,000 miles and carry normal complements of 36 to 128 officers and crew.

Ferrel, the newest addition to the fleet, is the only vessel of her kind in the nation, designed specifically to measure coastal and estuarine currents. The 133-foot ship carries with her a high-speed 59-foot tender

USC&GSS Rainier.



and a 28-foot JO boat to carry out operations in narrow channels and to service the ship's instrumented buoys.

The primary use of the *Ferrel's* survey data is in describing and predicting currents, both tidal and nontidal. Results of the surveys appear on the Coast Survey's small craft and tidal current charts, in tidal current tables and, indirectly, in a new series of bathymetric maps.

Ferrel data are used also in ESSA's new Estuarine Flushing and Non-tidal Current Prediction Service in Penobscot Bay and River, Maine.

This experimental service, the first of its kind, applies mathematical modeling techniques to the prediction of water renewal rates for various portions of estuaries. The service is an essential aid to managing and conserving water resources and to reducing estuarine pollution.

Among the more interesting of the fleet's ships are *Rude* and *Heck*. The 90-foot, 214-ton sister ships operate as a team in locating underwater navigational hazards. Using a method perfected by the Coast Survey more than a half-century ago, they operate about a mile apart, locating obstructions by dragging between them at a predetermined depth a steel wire suspended

USC&GSS *Mt. Mitchell*.



from trailing buoys.

The wire is normally towed at a depth of 35 to 90 feet, suspended from surface buoys.

When the wire catches on an obstruction, it becomes taut, forming the letter V. The least depth over the obstruction is then determined. When warranted, the obstruction is noted on nautical charts.

Each ship carries a normal complement of two officers and eight crewmen. One officer serves as commanding officer of the two ships, the other as executive officer.

THE FLEET'S missions each year are both varied and routine, often time-consuming, sometimes exciting.

A typical year's operations are those carried out in 1969. These included the assignment of four ships which joined other vessels and planes in a three-month study off the island of Barbados of the effects the



USC&GSS *Pathfinder*.

ocean and atmosphere have on each other and on the weather, important in improving our ability to forecast weather further in advance.

Other scientific projects included drifting across the north equatorial Atlantic on an air-sea research project, together with oceanographic ships of England and West Germany; analyzing the physical characteristics of the sea bottom off the Bahamas to provide knowledge of the engineering properties of marine sediments; an investigation of the nature of the Florida current or Gulf Stream in the Straits of Florida; and studies of the tides and tidal currents of the Gulf of Mexico.

Additional scientific projects included investigations of the Polar Front where the waters of the Arctic and Pacific Oceans meet in the North Pacific; studies off the northwest coast of the sub-surface undulations of the sea called internal waves; research on the submarine mountains and valleys on the floor of the North Pacific; and surveys of Norton Sound between Alaska and Siberia in a program aimed at estimating offshore mineral resources.

Scientific projects are carried out in cooperation with ESSA's oceanographic and meteorological re-

USC&GSS *McArthur*



search laboratories.

While these scientific activities were underway, other Coast Survey ships were measuring and charting the depths of America's coastal waters in Puerto Rico, North Carolina, Massachusetts, Hawaii, Alaska, Mississippi, and New York to insure safety from navigational hazards for the hundreds of vessels which daily pass to and from the ports of the U. S.; carrying out current surveys in Hampton Roads, Va., and Penobscot Bay and River, Maine; and wire dragging inshore waters in Chesapeake Bay and off Charleston, S. C., where the hulks of perhaps as many as five Confederate Civil War blockade runners were located.

THE FLEET is based at the Coast Survey's Atlantic Marine Center, Norfolk; the Pacific Marine Center, Seattle; and the Ships Base at Miami. Seattle is the home port for *Oceanographer*, *Surveyor*, *Pathfinder*, *Fairweather*, *Rainier*, *Davidson*, and *McArthur*, while Norfolk is home for *Mt Mitchell*, *Peirce*, *Whiting*, *Rude*, *Heck* and *Ferrel*. *Discoverer* is based at Miami.

The Coast Survey and the Navy have cooperated closely over the years. During World Wars I and II, Coast Survey vessels carried out wartime duties with



USC&GSS Davidson.

the Navy, some under their own command, others under Navy direction. They were there when American forces assaulted the Japanese in the Aleutians and in the South Pacific campaigns. Although sparingly armed, they survived enemy attacks and one German submarine is credited during World War I to a Coast Survey vessel.

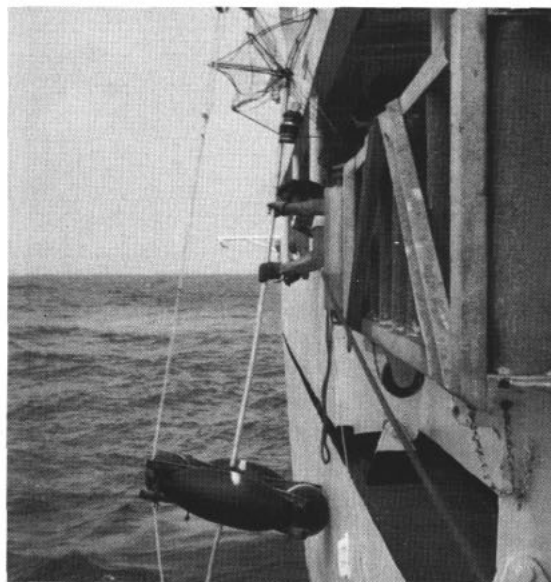
Before World War I, many naval officers served aboard Coast Survey vessels. Perhaps the most noteworthy was Captain Charles D. Sigsbee, commanding officer of the battleship *Maine* which was sunk in Havana harbor in 1898.

There you have it — an introduction to the ships and crews of the United States Coast and Geodetic Survey. They do an important job for all who sail on the high seas and are worthy of recognition. On these pages are photos of the trim C & G S ships to help you recognize the great Little White Fleet.



A lookout on the bridge of USC&GSS Mt. Mitchell.

Crewmembers of USC&GSS Mt. Mitchell retrieve a drogue buoy.



USC&GSS Ferrel.



Ceremonial



THE LIMOUSINE moves slowly through the White House grounds and then comes to a stop at the red carpet. A smiling President moves forward to greet the Prime Minister as the car doors are opened. They take their positions and cannons boom a salute. The Prime Minister and President stand at attention while honors are sounded, and then move forward to inspect the President's honor guard.

Navy men in the honor guard appear particularly sharp. They stand tall and proud, and their uniforms are crisp and spotless. Each move they make is a precise execution of military drill.

On occasions such as this, which you've probably seen pictured in newspapers and on television, members of the Navy Ceremonial Guard based in Washington, D. C., are performing at their usual finest. These men, carefully selected for their appearance and fitness as well as their proficiency in drill procedures, belong to an organization which specializes in official and ceremonial functions.

The mission of the Ceremonial Guard places this unit in the unique position of representing the Navy in Presidential, joint Armed Forces, Navy and public ceremonies in the presence of the highest ranking officials of the United States and foreign nations.

It's a full-time job, because parades, funerals, retirements, inaugurations and award ceremonies, plus visits by foreign dignitaries, are recurring occasions in the nation's capital.

ESTABLISHED IN 1931, the Ceremonial Guard is comprised of 107 nonrated men, nine petty officers and two officers (lieutenant commander and lieutenant (jg)). The Guard is attached to the Naval Station, only minutes from the Capitol, Pentagon and White House.

Membership in the Guard is exclusive; as a military ceremonial unit, the Ceremonial Guard must maintain suitability standards that are applicable to Presidential support activities, and it is the policy of the

• **OPPOSITE PAGE:** Members of the Navy Ceremonial Guard stationed in Washington, D. C., appear with members of the other services in ceremonies of many kinds—observing Lincoln's birthday, greeting dignitaries, or providing a guard of honor for military funerals.

Guard



Ceremonial Guard

Secretary of the Navy that only those personnel who are the most suitable and qualified in all respects will be assigned. Nonrated men are selected while undergoing recruit training.

The nine petty officer billets (one is for a chief boatswain's mate) are written for boatswain's mates, gunner's mates and signalmen. However, these billets may be filled by highly qualified men of other ratings. (For qualifications see page 57.)

The tour is two years for nonrated guardsmen. A petty officer serves two years or the normal tour of shore duty for his rating, whichever is greater.

Petty officers are selected primarily to provide leadership—and to train their men in leadership.

The idea of training within the Guard is that after sufficient guidance under the leadership of experienced Guard petty officers, nonrated guardsmen will learn to handle responsibility, taking charge of ceremonial details without petty officer supervision—important details such as a color guard at the White House or the Tomb of the Unknown Soldier.

A typical working day is from 0730 to 1630. If there is no ceremony to attend (and this is unusual), the Guard routine might involve physical training, close order drill, casket bearing practice, firing party and colors team practice, or a lecture or study hour

for advancement in rating. The remainder of the day may be devoted to uniform upkeep and recreation.

The Ceremonial Guard is very active in sports and has won the Naval Station league "Iron Man" trophy for four consecutive years. (The trophy is awarded permanently to the unit which wins it for three consecutive years.)

EACH TIME a head of state or other foreign dignitary arrives in Washington, the Ceremonial Guard provides two officers, a platoon of troops, the Navy color bearer and state flag bearers for the President's honor guard. Additionally, there are wreath-laying ceremonies at the Tomb of the Unknown Soldier and the John F. Kennedy gravesite, as well as honor cordons when foreign ambassadors present their credentials to the President or the Secretary of State.

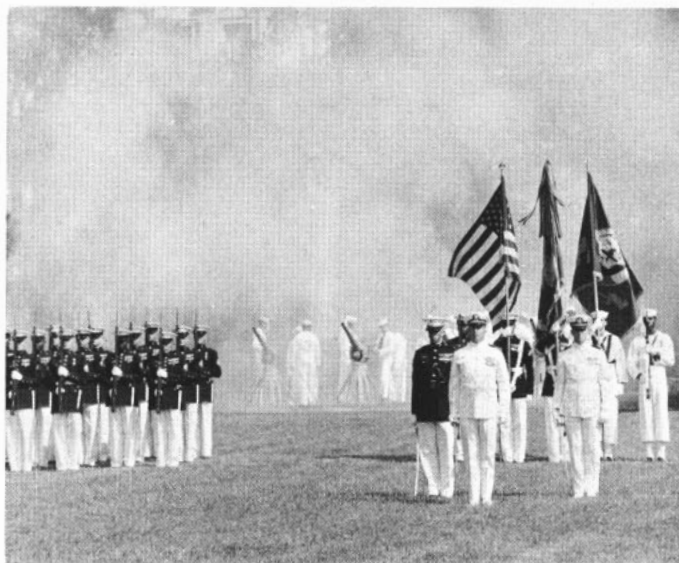
When the Secretary of the Navy and the Chief of Naval Operations receive official visitors, or when a long-time Navyman retires, the Ceremonial Guard forms the honor guard at the Washington Navy Yard.

In the course of all these ceremonies, members of the Ceremonial Guard probably see more politically prominent people than do any other Navymen.

Ceremonies such as Presidential inaugurations and State funerals also involve responsibility. For the former, the Guard provides a complete marching unit in addition to men for color guards and the flag section of the inaugural parade. For State funerals, the Guardsmen serve as casket bearers, color guards and marching units, and stand the "death watch" near the body which usually lies in state in the Capitol rotunda.

In recent times, the funerals of former President Dwight D. Eisenhower and Senate Minority Leader

• **PARADING THE COLORS**—Ceremonial Guard members and men of sister services form color guards for military ceremonies.



Everett Dirksen were two in which members of the Guard participated.

Naval funerals at Arlington National Cemetery also are solemn occasions in which the guardsmen participate—some 700 times each year. The guardsmen form the naval escort and serve as members of firing parties, color teams and casket bearer units, taking part in the funerals of Navymen ranging in rank from seaman to admiral.

GUARDSMEN WEAR the standard Navy uniform, blue or white, appropriate to the season. If the weather demands it, a peacoat and white scarf are worn. White gloves are worn during ceremonies.

Unusual features of the uniform are white leggings, white belts with special buckles, and shoes with double soles. The latter give the guardsmen added height, but most importantly are more comfortable when the men must stand on hot pavement. (The extra sole gives added support and also provides another layer of insulation from the heat of the pavement.) Metal cleats on the heels and toes prevent excessive wear, but this is a mixed advantage because the cleats have been responsible for the fall of more than one guardsman.

The entire uniform is identified as either "Winter Ceremonial" or "Summer Ceremonial," and each guardsman is provided with an additional cash allowance to purchase the extra items needed. (The white gloves, leggings, belts, scarves, and the brass belt buckles are provided by the Ceremonial Guard for each man.)

In order to be immaculate when on public view, the guardsmen put the washing machines and dryers in their barracks to good use. Each man is responsible for the care and maintenance of his uniform, and to make the job easier, he has access to tailor-shop-style pressing machines.

At a ceremony, the guardsmen always look as though they just stepped out of a shower and into spotless, pressed uniforms. This is true even though in order to arrive at the ceremony, the men must ride through heavy traffic in a bus. There are tricks employed, such as keeping white gloves in plastic bags until the men are ready to put them on, and, when they sit down in the bus, extending their legs in order not to damage the crease in their trousers. Getting on and off the bus requires great care in order to prevent the uniform from touching anything that will soil it.

What happens if a man's uniform gets splashed while he is waiting for a ceremony to begin? The answer is simple—the man just doesn't appear. There always are supernumeraries assigned, and the show goes on with an immaculate team.

IN A GROUP that thrives on perfection, and which is so much in the public eye, a mistake becomes news. An error during the arrival of a head of State

might be seen by the entire world. A faux pas at a funeral could be very embarrassing. There aren't any mistakes to report.

About the worst thing that has happened is a color guard's hat having been knocked off by a flag on a windy day. Sometimes the weather is so cold that rifles refuse to fire at a funeral. Occasionally, a guardsman will pass out from standing at rigid attention for a long time during hot weather. (But those who keep track of such statistics say the Navy Ceremonial Guard has fewer "casualties" than the other services.)

Whenever the guard participates jointly with the guards furnished by the other services, there is keen competition to put forth the best appearance. The Navymen are their own worst critics. To the public, they always have flawless uniforms and faultless precision. To his fellow guardsmen, however, a man who makes a small mistake or has even a microscopic smudge on his uniform may receive a razzing he will not soon forget.

—JOCS Dan Kasperick, USN.

The photographs appearing on these pages were made available by the Commander of the Ceremonial Guard, Lieutenant Commander J. S. Ekstrom, USN. Additional photographs were specially taken by Photographer's Mate 2nd Class Al Schmidt of the Public Affairs Office, Naval Station, Washington, D. C.



today's navy



Cree Takes Sterrett Award

The annual Marjorie Sterrett Battleship Fund Award has been presented to the fleet tug *uss Cree* (ATF 84).

The Pacific Fleet Service Force tug's welfare and recreation fund received \$714.43 for her selection as this year's winner of the award.

The Marjorie Sterrett Battleship Fund began in 1917 with the following letter to the editor of the *New York Tribune*:

"Dear Sir:

"I read in your paper every morning a lot about preparedness. My grandpa and my great grandpa were soldiers. If I was a boy I would be a soldier too, but I am not, so I want to do what I can to help. Mama gives me a dime every week for helping her. I am sending you this week's dime to help build a battleship for Uncle Sam. I know a lot of other kids would give their errand money if you would start a fund. I am thirteen years old, and go to Public School No. 9, Brooklyn.

Truly yours,
Marjorie Sterrett"

Each year the commanders of the Atlantic and Pacific Fleets nominate ships which stand first in battle efficiency competition within their types for the award. The Chief of Naval Operations chooses the winner from among the ships nominated.

Cree was commissioned in 1943, and took part in the assault and occupation of Iwo Jima and Okinawa Gunto during WW II. In the Korean conflict, she provided rescue, salvage and towing for the United Nations navies.

Since the Korean conflict, she has provided services for the Naval Electronics Laboratory, involving *Trieste* bathyscaph operations, and for the Fleet Training Group at her home port, San Diego. In May 1968 *Cree* became the first fleet tug to conduct a submarine rescue.

In addition to the Sterrett award,

Cree has won two Battle Efficiency "E"s as the most battle-ready ship in her class; three Ney awards for the best food service in her class; and the Arleigh Burke Fleet Trophy as the most improved battle-ready ship in the Fleet.

\$10,000 in Cash

For a few glorious moments, Electronics Technician First Class Thomas E. Davis III knew the feel of \$10,000 in small bills. Davis, who was serving in *uss Concord* (AFS 5), had shipped over for five years and the bundles of greenbacks represented his reenlistment bonus.

After he had been duly photographed with \$4000 under each arm and a \$2000 bundle of \$20s in his hands, Petty Officer Davis returned the cash to the ship's disbursing office in exchange for a less photogenic but more practical Navy check.

In addition to collecting a \$10,000 windfall, Petty Officer Davis was also becoming well traveled.

He was cruising the Mediterranean with the Sixth Fleet when he collected his bonus and was scheduled for transfer to the U. S. Naval Station at Roosevelt Roads, Puerto Rico.

Sailor-Teachers

Four seamen from the ocean minesweeper *uss Impervious* (MSO 449) found a rather unusual way of filling in a few spare hours of liberty recently while their ship was in the yards in Hawaii.

They coached students in recreational activities at the Hahaione Elementary School in Honolulu.

Coaching was nothing new to the foursome, comprised of Seaman Mike Ritchie, Electronics Technician Seaman Richard Kunz, Seaman Thomas Metzger and Radarman Seaman Bob Steele. All have experience teaching youngsters athletics.

This particular coaching arrangement was made in cooperation with the ship's commanding officer, Lieutenant Dennis M. McCord, and the school's principal, Mrs. Thelma Yoshida.

Playground activities range from limbering and stretching exercises to balanced walking maneuvers. Even a little touch football, including all-girl squads, is practiced.

The program, only a few months old, has proven so successful, that the men of *Impervious* and the school officials are considering expanding activities to include a safety program.

Meanwhile, where once the tot masses of Hahaione Elementary scrambled for the turf and sandlots at the sound of the recreation bell, they now walk with precision, in single file, to the rhythmic Pied Piper instructions of their Navy coaches.

—JO3 Sylvia M. Rosas, USN

Kagoshima Liberty

Not many Navymen see Kagoshima. When the cruiser *uss Newport News* (CA 148) anchored there recently, she was the first American naval vessel to visit in many months.

According to her crewmen, the picturesque southern Japanese port city was well worth the visit.

Kagoshima has been called "the Naples of the Orient." The reasons for the comparison are evident in the city's scenery — in particular, the active volcano Sakurajima which overlooks the bay. The resort city is full of green parks and shrines, yet has modern supermarkets and shopping malls.

However, the most attractive aspect of Kagoshima is its people. They have a reputation of being "kind and gentle."

Newport News crewmen were swarmed by curious — and friendly — people. Students gathered around them to practice their English. After conversations began, many *News*men found themselves invited to Japanese homes, where they were treated as honored guests.

Other Navymen took time to visit nearby attractions: the tropical

holiday spot of Nagasaki, and the Ibusuki resort hotel with its hot spring community baths.

For those with an eye for contrasts, Kagoshima offered many: ancient stone lanterns and neon signs, booming temple bells and the noise of industry, kimonos and miniskirts.

But *News*men remember the friendly people.

—Story by JOSN R. E. Rinehart

A Change in Destination —To Sasebo With Love

Love may not conquer all — but 8000 miles were no obstacle to the wives and sweethearts of crewmen aboard *uss Coral Sea* (CVA 43).

The ladies decided that a full



After 8000 miles and five months of separation, a happy couple is reunited in Sasebo.

seven- or eight-month cruise was too long a time to be separated from their men. Since the ship couldn't come home any earlier, they brought home to the ship.

A group of them arranged a flight to Japan last year to meet the ship in mid-cruise. That operation was called "To Tokyo With Love."

This year the operation was the same. Only the destination was changed.

The carrier had been deployed five months when the group board-

ed a plane in Oakland and flew to Fukuoka, Japan.

An advance party of 80 of their husbands met them at the airport; then the group went by bus to nearby Itazuke Air Force Base.

At the base, they attended a cocktail and dinner party at the officers' club, then slept in the BOQ the first night. The next morning, a caravan of buses took the group to Sasebo.

Their arrival could hardly have been better timed. As the buses pulled onto the pier, *Coral Sea* was being moved into place for mooring by yard tugs. Despite a cold rain, the women streamed from the buses.

Finally the brow was down and the ladies came aboard to meet their men. Confusion reigned on the quarterdeck.

Reunited couples gathered their belongings and headed for shore on leave.

The best port call of a cruise is coming home, of course. But for the men (and women) of *Coral Sea*, this time Sasebo was a close second.

—Story by JO2 Paul G. Sherwood

Crilley and Crandall Team Up

The Navy's two salvage heavy lift craft, *Crilley* (YHLC 1) and *Crandall* (YHLC 2), have provided valuable support for the "Brown Water Navy" in Vietnam.

The largest salvage craft in the world, they can lift 2400 tons apiece. They also provide a platform and support services for diving teams who survey sunken wrecks and prepare for recovery or destruction of the hulks.

The two craft were used together for the first time this winter by Harbor Clearance Unit 1 in the My Tho River. Their job was to raise the 20,000-ton dredge *Sandpumper*, which sank when it struck a live 105-mm shell on the bottom. Salvaging the dredge was expected to take somewhat less than a month.

No two jobs for the craft are alike. The officer and 26 enlisted men in each crew must be versatile and ingenious. When the volume of work demands it, a cook may



The guided missile destroyer USS John King (DDG 3), homeported in Norfolk, Va., steams in calm seas.

handle a line, or a gunner's mate may type an order.

The crews and the diving teams work in constant danger—not only from the enemy. Men on deck must work near heavy cables and machinery; divers operate in waters where swimming is nearly impossible and visibility is nil.

Maneuvering the craft presents more problems. They are not self-propelled, and must move by using their anchors or with the help of river tugs. The conning officer must stay alert to order the various positions needed to salvage a wreck.

Built in 1943, the craft were originally used by the Germans for harbor clearance in World War II. (*Crilley* was then named *Energie*, and *Crandall* was *Ausdauer*.) In 1957, the United Nations leased them from the German Navy to clear the Suez Canal of sunken vessels.

After the U. S. bought them in 1966 from Germany, the craft received extensive conversion and overhaul—including air-conditioning in the crew's quarters.

Crilley and *Crandall* don't look very impressive. But when they're manned by the "Salvors" of HCU-1, they give wrecks a big lift.

—JO2 Mike Davidchik, USN

Welcome, Welcome, Welcome

The cruise was over. Now the ships and their men came home to rest.

For some ships, it was the last homecoming of a long, eventful career.

- USS *Boston* (CA 69) returned to her namesake city for the last time before decommissioning, ending a six-month cruise in the Western Pacific (her third) and a 26-year history.

The guided missile cruiser provided gunfire support for allied troops ashore during her last deployment.

Even in the twilight of her career, *Boston* continued to gather honors. She was recently named to receive the Battle Efficiency "E" for the second straight year as the Atlantic Fleet cruiser with the highest standards of operational excellence.

Sixth in a line of Navy ships of the same name (the first two entered service in 1776), *Boston* earned 10 battle ribbons in World War II.

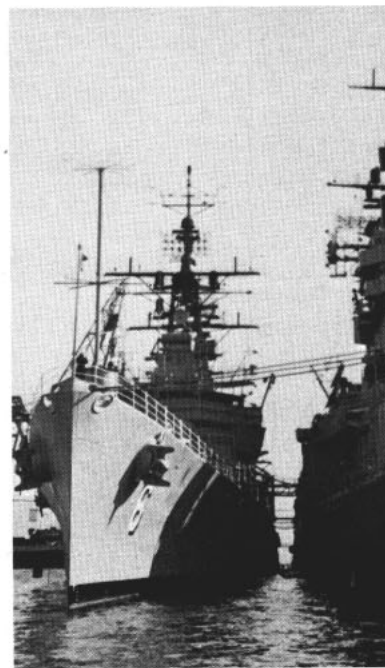
She provided antiaircraft cover for 3rd and 5th Fleet carriers and bombarded enemy-held beaches in many of the Pacific campaigns of

1944 and 1945. She was present at the Marshalls and Marianas, Iwo Jima, the Okinawa and Philippine campaigns—and finally at the surrender in Tokyo Bay.

After decommissioning in 1946, *Boston* was modernized and returned to active service in 1955 as the world's first guided missile cruiser, with her after 8-inch turret replaced by a twin *Terrier* launcher.

For the next 11 years she served in the Atlantic and Mediterranean. Since 1967, she made one Vietnam cruise a year.

- USS *Prichett* (DD 561) became the last *Fletcher* class de-



PROVIDENCE TO CHICAGO ONLY 10 FEET—(CLG 6) and USS Chicago (CG 11) moor side

stroyer to return to San Diego from an overseas deployment as she ended a Vietnam cruise and prepared for inactivation.

Commissioned 15 Jan 1944, *Prichett* saw action in three conflicts. She was hit by a kamikaze in World War II, patrolled Korean waters during the action in that country, and made five cruises to Vietnam.

During her last tour, *Prichett* provided gunfire support for allied forces in the Republic of Vietnam

and served as plane guard for attack carriers in the Seventh Fleet.

- *uss Galveston* (CLG 3) returned to San Diego from the Med on her last cruise.

The light cruiser was one of the ships in the group recently designated to be inactivated as a result of the Project 703 reduction ordered in the DOD cutback. But *Galveston* went out with a flourish as she lent a helping hand to people in distress.

Galveston's helicopter detachment made a dramatic rescue during the cruise. A Greek tanker, with 15 persons aboard, was aground and breaking up in a

back to San Diego after a seven-month cruise to WestPac. A month after her return, the cruiser was due to move to Long Beach for three months of yard work.

- *uss Biddle* (DLG 34) arrived at Norfolk after her second Vietnam deployment. The guided missile frigate performed search and rescue, plane guard and PIRAZ duties in the Gulf of Tonkin. Undersecretary of the Navy John W. Warner came aboard while *Biddle* was on station to award her the Meritorious Unit Commendation for her first deployment in 1968.

- *uss Halsey* (DLG 23) pulled into San Diego after a Vietnam cruise. She operated primarily as a search-and-rescue ship during her tour.

These destroyer types returned from Western Pacific cruises:

Perkins (DD 877), *Buck* (DD 761), *John W. Thomason* (DD 760), *Wiltsie* (DD 716), *John R. Craig* (DD 885), *Taussig* (DD 746), *Herbert J. Thomas* (DD 833), and *Hamner* (DD 718), to San Diego.

Destroyer Squadron 23, including *James E. Kyes* (DD 787), *Everett F. Larson* (DD 830), *Walke* (DD 723), *Bronstein* (DE 1037) and *Schofield* (DEG 3), to Long Beach.

- The Caribbean Ready Group came home to Norfolk after four

months in southern waters. The group includes the amphibious assault ship *Guam* (LPH 9), the amphibious cargo ship *Muliphen* (LKA 61), the dock landing ship *Plymouth Rock* (LSD 29) and the tank landing ships *Walworth County* (LST 1164) and *Grant County* (LST 1174).

The group took part in two operations during the cruise: "Escort Tiger 7," a quick-reaction exercise in the Virgin Islands; and "Jung-ex," a jungle survival exercise for Marines of the group in Panama.

- Five ships of the Sixth Fleet Amphibious Task Force returned to Norfolk together to end a five-month Mediterranean cruise. They are the amphibious transport *Francis Marion* (LPA 249), the amphibious cargo ship *Rankin* (LKA 103), the dock landing ships *Fort Snelling* (LSD 30) and *Donner* (LSD 20) and the tank landing ship *York County* (LST 1175).

- *uss Sylvania* (AFS 2) returned to the States after four and a half years in the Mediterranean.

The combat store ship changed her home port from Naples to Norfolk. She was relieved in the Med by the new *Concord* (AFS 5).

During her Sixth Fleet duty, *Sylvania* won three Battle Efficiency "E"s, two supply efficiency "E"s from ComServLant, the Mar-



The guided missile cruiser *USS Providence* by side at Naval Air Station San Diego.

storm off Malta. The helo from *Galveston* had taken one load of crew and passengers to safety and was hovering over the stricken ship with a second load when a huge wave struck the aircraft and damaged its engine. The helo barely made it to shore, where it crash-landed. All aboard were safe.

For other ships, homecoming meant only a short rest before taking on another assignment.

- *uss St. Paul* (CA 73) came

USS Boston (CA 69) returned to her namesake city for the last time before decommissioning, ending a 26-year history.



TODAY'S NAVY

jorie Sterrett Award and the Engineering "E."

- *uss Mauna Kea* (AE 22) came home to Concord, Calif., after an eight-month WestPac cruise.

The climax of the deployment came during Typhoon June in October, when the ammunition ship assisted in rescuing *ss Cebu Transport* after the Philippine freighter had lost all power and was in danger of sinking. After steaming to the scene through 40- to 60-foot seas and winds gusting to 105 knots, the Navy ship passed towing gear to an American merchant ship.

Then she made the most unusual replenishment of the cruise: sending 300 pounds of food, packed in watertight bags and kapok, to *Cebu Transport*. The hungry merchant crewmen dragged the bags across 100 feet of foaming seas—quite a departure from *Mauna Kea's* usual high-and-dry service.

- *uss Piedmont* (AD 17) returned to San Diego after seven months in the Western Pacific.

The destroyer tender provided a wide variety of repair services to

350 Seventh Fleet ships. On the side, in the Philippines and Taiwan, she distributed Project Hand-clasp materials, provided medical and dental care to remote villages, and encouraged crewmen to help during off-duty time in conversational English classes and village repairs.

5000 for Garrett County

Landing a helicopter on a deck area 53 by 60 feet usually is not much of a challenge to an experienced pilot. However, if it's night, and the deck is rolling in heavy seas, and it already is occupied by another aircraft, a successful set-down is tricky business.

And so it goes with flight operations aboard *uss Garrett County* (LST 786) which, despite the potential hazards, recently recorded her 5000th safe helicopter landing.

The modified tank landing ship has been in the aviation business since 1966 when she was taken from the Reserve Fleet and fitted to operate UH-1B *Seawolf* gunships. She has served off Vietnam since March 1967 as a patrol and

helicopter support ship.

The 5000th landing was made by Lieutenant Commander Victor Beck, USN, officer in charge of the 16-man helicopter squadron detachment embarked on board *Garrett County*.

Renshaw Wins Friends

As *uss Renshaw* (DD 499) came home to Pearl Harbor for retirement after her 13th Western Pacific cruise, her crew could be doubly proud.

In 27 years of service, she had made a fine record fighting America's enemies. But at the same time, the destroyer had done an equally good job of winning friends for America.

Off Vietnam, she had picked up a downed pilot in remarkably short order; had responded just as quickly to calls for fire on the gunline; had neutralized a weapons position firing on her spotter plane; and had ridden 30-foot waves while patrolling the Taiwan Strait.

Twice during the six-month deployment the ship was called on for blood donations. Both times the

Navy Students' Wives Work For the Community

Wives of students at the Naval Postgraduate School seldom if ever want for ways to occupy themselves while their husbands are busily attending classes or burning the midnight oil.

Many of them take part in the programs sponsored by the Officer Students' Wives' Club (OSWC) which has a membership of almost 800, one of the largest wives' clubs in the Navy.

Much of their work is routine, but many volunteer hours are exciting and rewarding. For example, some wives might be making layettes while others help collect blood for the Red Cross. Some work at the Thrift Shop, and many take training courses, run fund drives or help with the annual Dress-A-Doll project.

Like many other club members and individuals in the U. S., these Navy wives have helped support our servicemen in Vietnam. For instance, last August they gift-wrap

ped "ditty bags" filled with toothbrushes, soap, washcloths, pens, nuts, candy and gum, and mailed them in time for Christmas.

There are also many Red Cross volunteer workers among the wives. They assist at the hospital at Ft. Ord, a nearby Army base; at the Dependents' Clinic, Monterey Naval Auxiliary Landing Field; and at the Dental Clinic at the Presidio of Monterey.

The OSWC has worked on a number of projects sponsored by the Superintendent of the Naval Postgraduate School in addition to the social work conducted in the community. Two of the primary activities in community service include assistance provided the Lyceum of the Monterey Peninsula, a nonprofit organization which helps gifted children in the area; and cooperation with the Monterey Institute of Speech and Hearing.

—Story and Photos by
JOC Bill Locklar, USN.

crew responded. In Yokosuka, at the beginning of the cruise, 65 *Renshaw* men gave blood for U. S. servicemen in Vietnam. Later, in Hong Kong, 70 crewmembers donated blood to the Red Cross for the needy people of that city.

In Sasebo, a few *Renshaw* sailors discovered the World Mission for Children, one of several orphanages around the world under the same organization. After helping clean up the grounds and doing some carpentry work, they told their shipmates about the friendly children who wanted to play baseball and basketball with them.

That started a ball rolling, so to speak. Larger groups began visiting the orphanage to do cleaning and painting jobs. Then they passed the hat, bought materials and built a softball backstop.

When the backstop was finished, the Navy men celebrated by taking 20 of the children to the zoo for a day. They reported that it was hard to tell who had the best time — kids or sailors.

The time came for *Renshaw* to leave Sasebo. Her crewmen bought medicines, vitamins and candy for

the children, found they had about \$150 left over from their donations, and turned the money over to the orphanage director too.

In Hong Kong, *Renshaw* played host to more than 100 schoolchildren, aged six through 15. In groups of 20, the pupils and their teachers came aboard every day to tour the ship, eat ice cream and watch cartoons.

Renshaw didn't restrict her charitable work to in-port periods—nor to the people of friendly nations.

In the Gulf of Tonkin, she received a report that a 25-foot boat carrying five North Vietnamese fishermen was swamped and breaking up in heavy seas. The ship plowed through the waves at flank speed to reach the scene and picked up the fishermen from a rubber raft, which had been dropped earlier by a Navy plane.

Minutes later, the fishermen saw their battered craft sink.

Crewmen gave the Vietnamese dry clothes, fed them, and gave them cigarettes, fruit and candy. The fishermen couldn't thank the Americans in English — but their smiles expressed their gratitude.

Since World War II, *Renshaw* did her part in combat. But she also left many friends in Asia — even five in North Vietnam.

All Defensive Drivers

After taking note of the nation's rising automobile accident rate, the Navy Appellate Review Activity in Washington, D. C., didn't just sit there. It did something to keep its men alive and well.

All licensed Navy drivers were required to complete the National Safety Council's Defensive Driving Course which was prescribed by OpNav Inst 5100.10 of 25 Apr 1969.

The course was also open to the Activity's Marine Corps and civilians, and all licensed drivers on duty at that command successfully completed the course. The Navy Appellate Review Activity believes it is the first Navy command to achieve this.

And, as some sea lawyer somewhere must have said at some time, "A good defensive *modus operandi* in traffic is the best way to avoid becoming a *corpus delicti*."



Photos clockwise from above: Two wives prepare baby clothes while participating in the Layette Program. (2) As a Red Cross Volunteer, a Navy wife assists in dental care. (3) Wives attend the Navy Relief Training Courses. (4) OSWC members prepare "Ditty Bags" for Vietnam. (5) A dress from the Thrift Shop. (6) An OSWC member prepares a message for a Vietnam-bound package.





Two officers of VC-8 line up the QF-9 Drone aircraft for its final "NOLO" flight.



Drone Radio Control Console operator receives a final check out.

A Nostalgic Farewell to NOLO



Radio control equipment on board QF-9 Drone is checked out.

An RD2 makes a systems check of the Drone Control Console.



THERE WAS considerable nostalgia at Roosevelt Roads not too long ago.

After 10 years of such duty VC 8 got off its last NOLO (no live operator on board) flight in the Atlantic Fleet. The exercise went off perfectly.

Controlled remotely by VC 8's commanding officer, the pilotless plane rose steadily and was taken over by a formation of F-8 *Crusaders*. It then headed out to the Atlantic Fleet Weapons Range where it was to provide a target for evaluation of USS *Albany's* (CG 10) missile system.

Preparation of the drone was no casual affair. A lot of hard, careful work lay behind the flight. First, the plane was stripped of most of its gear until it carried the absolute minimum in navigational

and remote piloting equipment. All systems were checked off and the plane took on a full load of fuel.

The Fox control van then led it to the runway. The Fox van is an electronically equipped mobile ground control unit. Its job is to get the drone airborne. Up to this point, control of the drone was in the hands of Lieutenant (jg) Charlie de Gruy within the plane.

Upon reaching the proper launching point on the runway, the plane's systems were given a final checkoff and LTJG de Gruy left the plane. The UHF transmitter/receiver was removed from the nose gear.

All systems were GO, and the Fox van took over complete control of the aircraft. With a roar that could be heard up and down the VC 8 flight line, the drone lifted off in an almost perfect trajectory.

CONTROL WAS THEN transferred to a T-28 flying overhead. After the T-28 had taken the drone to a given altitude and speed, manipulation of the pilotless plane was taken over by an F-8. Both planes then headed for the firing range where the F-8 lined up the drone for its firing run.

For the final phase, control of the aircraft was turned over to the Atlantic Fleet Weapons Range telemetry controls.

Like a hunter in a duck blind, *Albany* waited for the signal that would launch her missile. In destroying the drone, realism was added to the exercise and technical evaluations of the warhead were made possible. For the drone to be destroyed, permission had to be

The Drone (right) in flight under radio control from the T-38 chase plane.



granted by OpDev 4 in Norfolk.

The use of such drones has played an important part in the evaluation of missile systems. Ships testing their missile firing components attempt to test the range and firing capabilities of the missiles and their warheads. By tracking the plane and exploding the missiles at a designated spot near the aircraft, they also test the accuracy of their tracking systems.

VC 8 launched its first NOLO in December 1959. The squadron has been at Roosevelt Roads, Puerto Rico, for the last 11 years. VC 8 also provides realistic multiple target drones for firepower demonstrations, as well as multiple target drone presentations in an electronic warfare environment.

The squadron holds three Fleet records. In June 1965, they had 13 target drone presentations in one day; seven QF 9 target drone presentations in one day and six QF 9 launches in a single day.

VC 8 now operates nine different types of aircraft and four concomitant target systems in support of the Atlantic Fleet Weapons Range.

FT Drill Team Is Sharp

"Mark time, mark! . . . 27—Alfa—Delta—Hut! . . . 15—two—rifle salute . . . Bravo—cross continuous—Hut! . . . Center line, ready now. . . ."

Heels click on pavement and rifles clatter, keeping the cadence. Polished bayonets flash together in the sunlight. The crowd lining the street becomes silent as 17 Navy-men on parade salute the colors.

"Forward — normal cadence — Hut!"

Applause sweeps through the crowd. The Fire Control Technician Class "A" School Precision Drill Team has again given a moment of inspiration to fellow Americans.

In its 14 years of existence, the team has taken more than 900 first and second place trophies in marching and show competition while performing its mission, presenting the Navy to the public.

The team, begun in San Diego



The Fire Control Technician Class "A" School Precision Drill Team performs the "Alpha Cross."

and then moved to Mare Island with the school, has never lacked volunteers. If students choose to join, they must take part in performances and two-hour nightly practices on their own time, and must keep a high academic average to stay in the team.

Despite the rapid turnover in membership because of the 18-week length of the school, the team keeps winning prizes in parade and field competition.

The FT team performs either as a parade unit or as a show unit. For show performances, eight men in a precise 22-foot square perform a series of intricate rifle and marching maneuvers. In parades, 17 men, including a color guard, perform rifle salutes, manuals and marching maneuvers as they approach the reviewing stand.

In both types of performances, the team uses standard 13-pound 1903 Springfield rifles with bayonets, not lightweight parade pieces.

Most of the team's performances are at local patriotic celebrations throughout Northern California. It appears every year at the San Francisco St. Patrick's Day, Columbus Day and Veterans Day parades.

The highlight of the year is the



The FT Drill Team performs a close order drill.

Armed Forces Day parade in Torrance. The FT school team has been named "Best Military Drill Team" six of the seven years it has participated, competing with teams from the entire western half of the nation.

A drill team is a dramatic way to show the traditional qualities of armed forces — highly trained men striving for individual perfection, but committed to a common purpose with pride.

The FT "A" School drill team, with every precise movement, tells the people watching them that its members are proud to be a part of the United States Navy.

—Story and Photos by
JO3 Toivo Avapuu

bulletin board

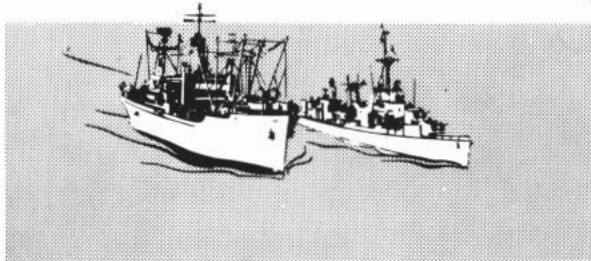
New Contact Offices Will Provide Link Between Overseas Navyman and Family

The link between the Navyman aboard ship overseas and his family has been strengthened by the establishment of contact offices at the home ports of commands during deployments.

Equipped to assist the Navy family in times of emergency and to provide advice in personal matters, the contact office also serves as an information source, providing up-to-date news of each unit's activities. This may include ship or unit achievements, port visits, schedule of returns and welcoming plans.

In addition to predeployment information provided in letters from commanding officers, and material provided in the Preparation for Overseas Movement brochures, the contact office will assist families in obtaining any additional information that will be helpful in getting settled before the ship or unit deploys.

The establishment of the contact offices was one of the recent innovations growing out of the 1969 Career Motivation Conference.



Insurance Dividend Announced for Holders of USGLI and NSLI Policies

During 1970, about \$264 million in dividends will be shared by the 4,191,200 policyholders of U.S. Government Life Insurance (USGLI) and National Service Life Insurance (NSLI).

Dividend payments this year will exceed those of 1969 by \$28 million, and payments will be made on the policy anniversaries. This year's dividend increase was made possible through larger interest earnings in the two insurance funds.

The size of each dividend will depend upon the insurance plan, the age of the insured, the age of the policy and its face value. According to the VA, however, the dividend paid on each USGLI policy will average \$115. The NSLI dividend, almost \$61.

Cash payment of dividends on both USGLI and NSLI policies is automatic, and there is no need to write to the Veterans Administration.

When a policyholder dies or surrenders his policy, accrued dividends are usually paid at this time. No further payment is made when the annual dividend is declared.

Storage to Be Made Available for Car And Property While You Are Overseas

It's the morning your ship deploys. You'll be gone seven or eight months.

The married man in your division gets up at home, throws his clothes and shaving kit into an AWOL bag, and drives to the ship with his wife and kids. After the ship pulls out, his wife will drive the car back home.

But you aren't married. So what can you do with your car — not to mention your stereo, civvies, and all the other things you can't take with you?

Put them in commercial storage? Expensive. Let your family in Kansas keep them? That'll be inconvenient when you get back from the cruise — and in the meantime, you shudder to think what your stupid kid brother could do to your car if he gets behind the wheel.

Now the Navy will offer a third choice: leave your car and belongings on base.

The advantages of on-base storage are evident: low (or perhaps no) cost; security; and convenience when you pull back in.

OpNav Notice 1740 of 14 Jan 1970 sets the policy: "Base commanders and station commanding officers shall provide secure storage space for the storage of personal effects and automobiles of deployed bachelors."

Details are left up to each activity, depending on what facilities are available. In most cases, unused buildings will be furnished as locker clubs, and unused areas will be enclosed with chain link fence for parking cars.

Don't expect results tomorrow. Storage areas won't just spring up overnight, of course. It will take some time for commanders to study the available buildings and space, and then to set up lockers, fences and all the other necessary arrangements. If your cruise begins tomorrow, you'll have to wait until later to take advantage of the program.

When your base does open its storage areas, you will be allowed to drive your car on base to take it to the parking area even if your state's liability insurance requirements are lower than the base's and you can't get a base sticker.

And, of course, wherever you store your belongings, you'll want full insurance — especially fire and theft coverage. Nevertheless, you'll be much less likely to collect on it if your property is on base; your car is considerably safer behind a fence than in your brother's hands.

In the words of the notice, the Navy will "spare no effort to solve the problems that cause inconveniences and annoyance to our personnel."

Transportation Available for Foreign Cars, But Delivery May Be Very Slow

If you have a foreign car you wish to transport home aboard a Military Sea Transportation Service ship, you may do so on a space available basis, but don't expect immediate delivery.

This applies to all grades, E-4 and above, including civilian employees in comparable grades.

The delay, says MSTS, is due to a backlog of foreign vehicles waiting to be shipped from European ports. And since autos can be shipped only on MSTS controlled ships, space available shipments from European ports, in particular, will remain limited.

MSTS controlled ships include government owned vessels operated by MSTS or commercial ships chartered and operated by the Navy's sealift command. Not many controlled ships are operated between East Coast ports in the United States and Europe. Most are operated in the Pacific. Even so, there are fewer servicemen and civilian employees in the Pacific and Far East areas who own foreign cars or who are eligible to have their automobiles shipped space available.

According to MSTS, to ship a car space available, you must pay handling costs at the port where the auto is loaded and again at the delivery site. In addition, you are charged 25 per cent of MSTS' normal rate for shipment of a privately owned vehicle.

Tariff for shipment of a POV — privately owned vehicle — from Europe to the East Coast is \$20.70 a measurement ton, equal to 40 cubic feet. Therefore, the cost depends upon the size of the car being shipped rather than its weight.

MSTS rate for shipment from the United Kingdom to the States, for example, is \$19.80 per measurement ton. Cost from Hawaii to the West Coast is \$16.20 per measurement ton, while the tariff for shipment from the Philippines is \$26.30. Rate for movement of an automobile from Japan, Korea and Okinawa is \$23.60.

Cost of moving a popular small, two-door foreign car from Europe to the East Coast would be 25 per cent of \$171.81 (8.3 measurement tons times normal MSTS rate) or \$42.95. The comparable cost for a Scandinavian built four-door sedan, which is 10.2 measurement tons, would be \$52.79.

As a matter of comparison, MSTS officials consider the average medium-priced American car measures from 13 to 15 measurement tons.

Correct Shore Tour Lengths of HMs Is Controlled by BuPers Notice 1306

In the December issue of *ALL HANDS*, on page 62, are listed the normal shore duty tour lengths in the continental U. S., for POIs and below.

Included is a listing for Hospital Corpsmen. Scratch that listing.

Shore tour lengths for HMs are governed by BuPers Notice 1306 of 13 Jun 1969, not by the *Enlisted Transfer Manual*. Although the 13 June Notice is

undergoing revision (in fact it may be in print as of this writing), the policy for rotation of Hospital Corpsmen is briefly as follows:

Serving Ashore

About four to six months before an HM completes a shore tour, he will be nominated for rotation to the operating forces.

Depending on his career history, NEC and the Fleet's requirements, he will be made available to either EPDOLANT or EPDOPAC for assignment to sea duty. Sea duty includes overseas (sea), toured sea duty, duty with the Fleet Marine Force and the Seabees, toured ships and shipboard duty.

Serving at Sea

If a corpsman is assigned to EPDOLANT, he may expect to complete about 12 to 15 months or, if he's on independent duty, about 20 months in that fleet before rotating to EPDOPAC.

If he's assigned directly to EPDOPAC, an HM may expect to complete from 12 to 15 months—or 20 months (independent)—sea duty before becoming Seavey eligible.

Serving in RVN

Upon rotation from EPDOLANT to EPDOPAC, an individual may be assigned to a Seabee or FMF unit, to a toured ship or to some other tour for a period of one year.

All hospital corpsmen who complete a Vietnam tour will be assigned shore tours as follows:

- 20-month tour if non-Seavey eligible.
- 24-month tour if Seavey eligible.

Certain personnel, because of NEC shortages, may be extended at sea or on shore if their particular specialty is needed.

Separate policies regarding male hospital corpsmen rotations have been in existence since 1966, primarily because of the corpsmen's involvement in Vietnam.

Meanwhile, Hospital Corpsmen are asked to hold tight and be alert to the latest revision to BuPers Notice 1306.



Transfer Orders for AQ Technicians Switch From Field to BuPers Control

TRANSFER ORDERS written for Aviation Fire Control Technicians have been issued directly from the Bureau of Naval Personnel in Washington, D. C., since 1 January.

The switch from field control to Bureau control was made with the aim toward improving the placement of AQ technicians according to their training and experience, and to increase the AQ reenlistment rate. According to rating control officials, this aim should be achieved, largely by the AQ detailer giving maximum individual consideration to duty preferences.

In the Bureau, the detailing functions of the AQ rating have been incorporated within the Avionics Rating Control Unit (Pers-B2141). A senior pay grade Aviation Fire Control Technician has been assigned



to the unit as the rating's technical advisor and detailer and is considered the AQ's Man in the Bureau.

In keeping with the individual consideration approach to detailing, personnel are invited to correspond informally with the AQ detailer on matters related to assignments. The standard chain of command should not be bypassed, however, when official requests are involved.

Commanding officers, too, are invited to forward comments and recommendations relative to technical changes and problem areas within the AQ rating. Individual or command correspondence should be directed to: Bureau of Naval Personnel (Pers-B2141), Department of the Navy, Washington, D. C. 20370, ATTN: AQ Rating Control. The detailer may also be reached by phone on AUTOVON 224-4785.

For the more than 3700 AQs now on active duty, details concerning preference cards, assignments, training, tour lengths and reenlistment procedures are briefly as follows:

Duty Preference Cards — Preference cards should be submitted within four months after reporting to a new duty station, and whenever changes occur, such as completion of schools, change in qualifications, dependency changes or a change in duty preference.

The standard E7/E8/E9 Duty History and Preference Card (NavPers 1306/34 (3-69)) should be used by all AQs to submit duty preferences. If this form is unavailable, a standard 5- by-8-inch card should be used. List previous training and assignments, dependency status, as well as duty preferences. Type squadron may be substituted for type ship in the appropriate block on the preference card.

Make duty choices as broad as possible to provide the detailer with reasonable alternatives. Avoid repeating duty choices to stress a preference by using the remarks block. Additionally, while cross-fleet

transfers are the exception rather than the rule, do not let the odds against receiving such an assignment preclude requesting such duty stations.

If anything is to be stressed, it should be the importance of having a current, well thought-out duty preference card on file with the AQ detailer.

Assignments — Normally, orders will be issued four months before transfer. Therefore, inquiries regarding future assignments are not encouraged since specific information is not available before the four-month time frame.

The type of assignment drawn is dependent upon training and experience backgrounds. Consequently, individuals who receive high-cost training in sophisticated weapons systems may expect to be retained within that particular aircraft community for at least one sea or shore cycle.

Training — Intermediate B School will be considered as a prime goal for all career designated Aviation Fire Control Technicians. Such training will normally be scheduled as a STAR benefit or for individuals completing shore duty. Cream-of-the-crop selection will continue to be reflected in assignments to Advanced B School and participation in NESEP, ADCOP and similar education programs.

Tour Lengths — While some tour completion dates may be modified as a result of the AQ detailing switch, every effort is being made to honor TCDs established before 1 Jan 1970. Furthermore, since the detailer assumes that career designated personnel will reenlist on board, their tour lengths will be unaffected by the date of their expiration of active obligated service.

However, to take advantage of reenlistment options afforded first-term personnel, tour lengths will be modified where necessary (see *Enlisted Transfer Manual* 7.41).

Effective 1 Jan 1970, AQ tour lengths were established as below:

| Rate | Sea | Shore |
|--------------|-----|-------|
| AQC5 | 36 | 48 |
| AQC | 36 | 48 |
| AQ1 | 39 | 48 |
| AQF2/AQB2 | 36 | 45 |
| AQF3/AQB3* | 40 | 45 |
| AQFAN/AQBAN* | 40 | 45 |

* These shore tour lengths are for individuals rotating from sea duty. An A School graduate being initially ordered to shore duty will be offered a 24-month tour if he agrees to extend his enlistment so as to have 14 months' active duty remaining upon completion of his tour. Otherwise, he will be ordered to 18 months' duty ashore.

Reenlistments — Personal attention is an important keynote in the Navy's reenlistment program and it was one of the major aspects which supported the conversion to Bureau control of the AQ ratings.

As a result, every appropriate step possible is being taken to retain highly trained, topnotch Aviation Fire Control Technicians.

Dental Technicians to Get Their Orders From BuPers Detailers Too

Effective 1 April, all dental technicians, including designated strikers, are being detailed from a centralized assignment desk in BuPers.

Each DT should have a current duty history and preference card on file with the BuPers detailers.

These and related points on DT distribution control were discussed in BuPers Notice 1306 (of 23 Dec 69).

The directive stressed the importance of having up-to-date duty preference cards on file with the BuPers detailers. NavPers form 1306/34 should be used for this purpose.

All DTs except chief petty officers were to submit a current duty preference card to the Bureau of Medicine and Surgery (Code 6133), before 1 April. Chief petty officers who were already under BuPers distribution control already had the preference cards on file. Waves were to submit the card in duplicate (the extra copy is for the Wave detailer).

Thereafter, a new card should be submitted four to six months after reporting to a new ship or station for duty, and six months before a tour completion date. Also, a new card should be submitted whenever there is a significant change in duty preferences.

The BuPers notice reminded DTs to request duty only in areas which have DT billets. ALL HANDS, December 1969, has a listing of billets.

List of New Motion Pictures Currently Available to Ships and Overseas Bases

Here's a list of recently released 16-mm feature motion pictures available to ships and overseas bases from the Navy Motion Picture Service.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Once Upon a Time in the West (WS) (C): Western; Claudia Cardinale, Henry Fonda.

Chitty Chitty Bang Bang (WS) (C): Musical Fantasy; Dick Van Dyke, Sally Anne Howes.

The Great Bank Robbery (WS) (C): Comedy

Western; Zero Mostel, Kim Novak.

The Southern Star (WS) (C): Comedy Adventure; George Segal, Ursula Andress.

The Devil's Bride (C): Melodrama; Christopher Lee, Charles Gray.

Breakout (C): Drama; James Drury, Woody Strode.

The Wild Bunch (WS) (C): Western; William Holden, Ernest Borgnine.

The April Fools (WS) (C): Comedy; Jack Lemmon, Catherine Deneuve.

Number One (C): Drama; Charlton Heston, Jessica Walter.

Young Billy Young (C): Western; Robert Mitchum, Angie Dickinson.

Finian's Rainbow (WS) (C): Musical Fantasy; Fred Astaire, Petula Clark.

Charly (WS) (C): Drama; Cliff Robertson, Claire Bloom.

The Bridge at Remagen (WS) (C): Action Drama; George Segal, Ben Gazzara.

Ace High (WS) (C): Western; Eli Wallach, Terence Hill.

The Undefeated (WS) (C): Western; John Wayne, Rock Hudson.

Me, Natalie (C): Comedy Drama; Patty Duke, Martin Balsam.

Isadora (C): Drama; Vanessa Redgrave, James Fox.

The Oblong Box (C): Mystery; Vincent Price, Christopher Lee.

The Trouble With Girls (WS) (C): Comedy; Elvis Presley, Marlyn Mason.

The Wise Guys (WS) (C): Action Drama; Bourvil, Lino Ventura.

Stiletto (C): Melodrama; Alex Cord, Britt Ekland.

Some Kind of a Nut (C): Comedy; Dick Van Dyke, Angie Dickinson.

Butch Cassidy and the Sundance Kid (WS) (C): Comedy Western; Paul Newman, Robert Redford.

The Gypsy Moths (C): Action Drama; Burt Lancaster, Deborah Kerr.

Once You Kiss a Stranger (C): Melodrama; Paul Burke, Carol Lynley.

The File of the Golden Goose (C): Drama; Yul Brynner, Charles Gray.

Castle Keep (WS) (C): War Drama; Burt Lancaster, Patrick O'Neal.

A Place for Lovers (C): Drama; Marcello Mastroianni, Faye Dunaway.

The Secret World (C): Drama; Jacqueline Bisset, Giselle Pascal.

A Nice Girl Like Me (C): Comedy; Barbara Ferris, Harry Andrews.

The Lion in Winter (WS) (C): Drama; Peter O'Toole, Katherine Hepburn.

80 Steps to Jonah (C): Melodrama; Wayne Newton, Jo Van Fleet.

A Walk With Love and Death (C): Romantic Drama; Anjelica Huston, Assaf Dayan.

The Lonely Profession (C): Drama; Barbara McNair, Harry Guardino.

A Talos missile is fired during a training operation. This unusual effect is seen as a line drawing interpretation of a photo by CDR Samuel B. Lancaster, Jr.





Personnel waiting for a flight via Military Airlift Command. Last year MAC airlifted three million passengers.

TRANSPORTATION ROUNDUP

Heading

IF YOU KNOW in advance just what problems may arise during an overseas transfer, that knowledge may help to reduce any pre-transfer jitters you may develop.

The first question you have, no doubt, is whether you'll go by ship or air.

You'll probably fly. Nearly all persons traveling to overseas assignments on foreign soil, or on U. S. soil outside the 48 contiguous states do fly, as the Military Sea Transportation scheduled passenger service has been discontinued, and U. S. flag commercial surface passenger liners are gradually being withdrawn from scheduled trade routes.

With it fairly well established that you'll fly to your overseas assignment, the next logical question is: How?

For all practical purposes, there are two categories of air travel that have been set down by the Department of Defense which relate to transporting you and your dependents to overseas areas. These include:

- Military airlift service provided by the Military Airlift Command at a common-user tariff rate.
- Pure commercial flights.

MAC military and MAC charter flights operate from military air terminals, such as Travis Air Force Base near San Francisco, and McGuire AFB near Philadelphia, and individual seating accommodations are arranged on regularly scheduled commercial aircraft operating in regular commercial service from civilian air terminals, such as John F. Kennedy Inter-

national Air Terminal in New York.

Other air travel overseas is provided through U. S. flag international air carriers. These airlines offer special tariff rates for DOD-sponsored passengers between the United States and specified overseas destinations, and return. At such times when MAC airlift service is not available when required, then commercial air passenger service is used.

Before a Navy dependent can enter an overseas area, the member generally has to request authorization for entry of dependents. This authorization must come from the designated administrator of the area to be entered. For instance, individuals must receive authorization from the Commander of the U. S. Naval Forces, Philippines, for permission for their dependents to enter the Republic of the Philippines.

An individual headed for Guantanamo Bay, Cuba, must receive authorization from the Commander of the Naval Base, Gitmo, for dependents to enter Gitmo. Keep in mind that it's the member's dependents who require permission to enter a specific area, not the member himself.

Overseas?

Back to the question: How?

Passengers who require transportation from the United States to Subic Bay, Republic of the Philippines, and those from the United States to Rota, Spain, for example, are usually booked on MAC military and commercial contract MAC flights.

However, persons whose destinations are Alaska, Argentina, Belgium, Bermuda, Brazil, Cyprus, Denmark, Finland, France, Greece, Italy, Malta, Netherlands, Norway, Puerto Rico, Portugal, Sicily, Sweden and Turkey, more than likely will have accommodations arranged for them aboard a U. S. flag international air carrier.

This same type travel is also arranged for individuals en route to any or all of the countries on the African Continent and to all those in the Middle East.

In addition, almost all passengers whose destination is the Canal Zone, and who depart the U. S. unaccompanied from San Diego, Los Angeles, San Francisco or Seattle, travel via U. S. flag commercial air. The same is true of those passengers traveling unaccompanied from the Canal Zone to any of the coastal cities mentioned.

Individuals heading for Hawaii under unaccompanied permanent change of station or temporary orders from San Diego, Los Angeles, Portland or Seattle, may travel to and from in U. S. flag international air carriers. And, personnel traveling by air between Japan and either Seattle or Portland may be booked on U. S. flag international carriers.

Individuals traveling by strictly commercial air at the international tariff rate are usually the exception rather than the rule, and this transportation is used only when no other less costly air travel is available.

If you are traveling overseas unaccompanied by dependents, it is up to the command that you are leaving to make all the arrangements for your travel. It's also up to the command to confirm your overseas flight reservations and to endorse your orders as to when and where you should report and the departure time for a designated flight. Authorization for payment of the flight — either a GTR (Government Transportation Request) for commercial flights, or an MTA (MAC Transportation Authorization) for MAC flights — will be issued by the command, as well.

If you are directed to report before the expiration of any authorized delay en route (such as leave), then the reservation confirmation will terminate the delay. In other words, your leave time would be cut short and you would be expected to report according to the direction of your reservation confirmation.

On the other hand, if you are directed to report for transportation after the expiration of a delay en route, then additional delay will result. You may, if you have no objection to being charged leave for

Navy and Air Force personnel are processed through a MAC passenger service desk.



bulletin board

this additional delay, remain at home until time to report as directed. But, if you don't wish to be charged leave for the additional delay, you must report to a predesignated Navy activity and report in. The period between reporting in and your flight departure will be regarded as "temporary duty awaiting transportation."

Much more is involved, of course, when you travel concurrently with your dependents, or are making arrangements for them to travel overseas alone.

To begin with, your eligibility for an overseas assignment and the eligibility of your dependents for transportation overseas will be determined during an interview held by your command.

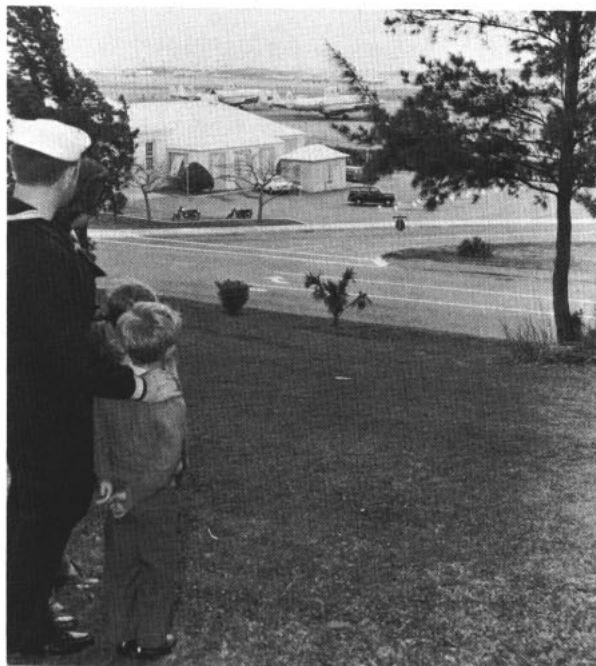
In this regard, dependent travel to a duty station outside the United States is not authorized in the case of a member whose expiration of active obligated service is less than the prescribed overseas tour with dependents. If such is your case, you may acquire sufficient obligated service by reenlisting, executing a voluntary agreement to extend your enlistment, or agreement to remain on active duty.

The latter is a must for those individuals who have more than 17 years of active duty. They must sign an agreement to remain on active duty for the prescribed overseas tour with dependents. Reserve Navymen also must execute an agreement to remain on active duty in order to acquire the necessary obligated service required for an overseas tour with dependents.

Furthermore, E-4s must have more than four years' service on the date their orders become effective in order to be entitled to transportation of their dependents at government expense.

After your eligibility has been determined, a number of step-by-step procedures should be followed, beginning with submission of a request for entry approval to the appropriate overseas area commander having jurisdiction over the command to which you are being assigned. Secondly, if passports are required, application should be made (see your personnel

A passenger service specialist sees that tiny travelers get their share of attention.



A Navy family looks at an overseas base, their new home.

officer) using DD Form 1056, Authorization for a Non-fee Passport.

If your command receives an entry approval for your dependents from the overseas command to whom you made your request, then you may proceed to apply for transportation for your dependents. This is done by submitting DD Form 884, Application for Transportation for Dependents, according to the guidelines set down in *U. S. Navy Travel Instructions* (your personnel officer should have a copy). This application is forwarded to the appropriate overseas passenger reservation activity which will arrange accommodations, either for concurrent travel or unaccompanied travel.

Travel to transpacific destinations, including Hawaii, Midway, Japan, Korea, Taiwan, Guam, Okinawa, Philippines, Vietnam, Australia, and mobile units and ships homeported in the Western Pacific area, is arranged by the Director, Transportation Division, 12th Naval District/Naval Base, San Francisco. Travel to Alaska is arranged by Headquarters, 13th Naval District, in Seattle. Travel to all other destinations is arranged by the Bureau of Naval Personnel Transportation Division.

Normally, passports are not required for travel of military personnel, but are required for dependents and civilian employees. However, the list of countries NOT requiring dependents and civilian employees to carry passports is shorter than those countries which do. Therefore, here's the list of the areas where passports are not required: Argentina (Newfoundland), Bermuda, Trinidad, Barbados, Antigua, Eleuthera, Canal Zone, Guantanamo Bay, Puerto



Personnel deplane from contract flight at Cam Rahn Bay.

Rico, Alaska, Hawaii, Midway, Guam, Kwajalein, and Chi Chi Jima. Overseas areas where passports are not required for military personnel are listed in the accompanying box.

There are four types of passports issued by the Department of State: 1) Diplomatic, 2) Official, 3) Dependent, and 4) Regular.

The Diplomatic Passport (black) is issued to officers accredited to U. S. Embassies or Legations abroad and to dependents of their households.

The Official Passport (maroon) is issued to officer and enlisted personnel and civilian employees proceeding abroad on official duty under orders to a country requiring documentation. The official passport is issued to authorized dependents of civilian employees and to military dependents only when deemed necessary by the Department of State, depending upon the sponsor's assignment and the requirements of the country in which he is serving.

The Dependent Passport (blue) is issued to military dependents if their sponsor's assignment or destination does not warrant issuance of a diplomatic or official passport. This type of passport is endorsed by the Department of State to the effect that it is valid only for use in connection with the bearer's residence abroad as a dependent of a member of the United States military or naval forces.

The Regular Passport (blue) is issued for all unofficial travel, including travel for personal reasons, tourism, leave, and for dependents who wish to reside abroad at their own expense. The fee for the Regular Passport is \$12, nonreimbursable.

An individual is responsible for obtaining all necessary visas for Regular Passports, whereas all nec-

essary visas with regard to any of the other three passports are obtained by either the 12th Naval District Passenger Transportation Office or the Chief of Naval Personnel (Pers-B315).

Passports are forwarded to individuals in the following manner:

- Passports of unaccompanied personnel traveling on MAC or commercial surface ships will be forwarded to the address indicated in item 11 on DD Form 1056, the application.

- Passports of dependents traveling on MAC and required only for performance of duty will be forwarded to the new duty station for issue.

- Passports of dependents traveling on MAC and commercial surface ships will be forwarded to the appropriate passenger transportation office for further issue to the dependents.

- Passports for personnel traveling by commercial air will be forwarded to the address indicated on the application. In any case, passports will not be mailed to a commercial airport.

Of significant importance in relation to overseas assignments is the fitness of your dependents. If you have any questions with regard to this matter, consult Chapter 6, para 6.21 of the *Enlisted Transfer Manual*, and para 7 of BuPers Inst 1300.26 series.

Additionally, as a sponsor, you should ensure that your dependents obtain immunizations for overseas travel, either from the nearest Armed Forces medical facility or from a private physician.

Immunization requirements and procedures are covered fully in BuMed Inst 6230.1 series. Here, briefly, is the basis of that instruction:

It is essential that all individuals traveling under the sponsorship or guidance of the U. S. Armed Forces to areas outside the United States receive all necessary immunizations. These must be recorded in the yellow International Certificate of Vaccination, as approved by the World Health Organization—Public Health Service Form PHS-731 (Revised 9/66).

When you commence your travel, be sure not to enclose your certificates in your orders, or pay rec-

A Navyman takes advantage of hospitality gear while en route to overseas duty.



bulletin board

ords, or pack them away in your luggage. They must be available for inspection by health authorities at any time, most certainly at the aerial port of embarkation.

If you or any member of your family cannot meet the immunization requirements of smallpox, yellow fever, and cholera, because of allergic reactions, consult BuMed Inst. 6230.1 series for processing procedures.

Special immunizations are required in four specific geographic areas.

Area I requires smallpox, typhoid, tetanus-diphtheria, poliovirus, and influenza vaccine. It includes the United States (the 50 states, District of Columbia, Virgin Islands, Puerto Rico, Wake and Midway Islands); Canada; Greenland; Iceland; Marshall Islands; Guam; all Pacific Ocean islands east of the 180th Meridian, Baja, Calif.; and the area in Mexico north of the line 50 miles south of the United States and Mexico border.

Area II includes all other areas outside of Area I. Immunization requirements for all individuals traveling to or through Area II are the same as for Area I, plus typhus. Immunization against yellow fever may also be required if dependents are traveling to an area where yellow fever may be contracted.

Area IIC requires the same immunization as Area I, plus typhus and cholera. It covers the Arabian Peninsula, Afghanistan, Burma, Cambodia, Ceylon, Republic of China, Hong Kong, India, Indonesia, Laos, Communist China, Macao, Malaysia, Pakistan, Republic of the Philippines, Thailand, Republic of Vietnam, Iran, Iraq, Syria, Turkey, Lebanon, Israel, Jordan, and Kuwait.

Area IICP—In addition to the requirements for Area I, all persons traveling to or through, or residing in Area IICP—Laos, Cambodia, and Vietnam—must be immunized against typhus, cholera and plague. At worst, you could end up needing nine inoculations.

Travel for the expectant Navy wife—even by air—requires special consideration. Women up to eight months (or 240 days) pregnant may be accepted as passengers for MAC flights unless travel is considered

unadvisable by a physician.

Consequently, a medical statement indicating the duration of pregnancy and fitness for air travel must be provided. Women six weeks or more post partum and infants six weeks or older are acceptable for air transportation as passengers unless a doctor advises otherwise. Infants under six weeks old and women who are less than six weeks post partum may be accepted if considered medically sound, and have been so certified by a medical officer.

A child under 12 years old will not be accepted for air transportation unless accompanied by a parent or a responsible adult designated by the parent or other competent authority.

Women in the first eight months of pregnancy will be accepted for commercial air travel. However, women in their ninth month of pregnancy must present an obstetrician's certificate dated within 72 hours (preferably 24 hours) of departure time, stating that the woman has been examined and found physically fit for air travel—from (place) to (place) on (date) and that the date of the child's birth is expected to be (date).

As a rule, infants under 10 days of age are not accepted for air transportation; however, questionable cases may be referred to a medical examiner for decision.

Since you will be traveling by air, more than likely, you will have a baggage allowance limit. In definition, this amounts to that luggage carried free plus any excess baggage which is authorized by orders. Dependents, however, are not authorized additional space for transport of excess baggage.

For MAC and MAC commercial air charters, the free baggage allowance is 66 pounds per passenger for all travelers, regardless of age. Each passenger is allowed one piece of hand baggage (carry-on-board) not to exceed 20 by 12 by 7 inches in size. Each piece of stowed baggage which you check aboard may not exceed 15 cubic feet.

In addition, the combined weight of hand and stowed baggage may not exceed the free allowance—66 pounds—plus excess authorized on the MAC Trans-



Personnel of a naval supply depot off-load household effects shipped overseas.



Two Navy men visit a Family Services Center and Housing Referral Office. FSCs are located at many stations in CONUS and an increasing number of locations overseas.

portation Authorization. Purses, cameras and the like will not be weighed and may be carried on board in addition to hand baggage.

Baggage weight in excess of the free allowance must be indicated by endorsement on your PCS orders. The command from which you are being detached and all Passenger Control Liaison Officers at the MAC air passenger terminals are authorized to provide up to a maximum of 120 pounds of baggage allowance for the overseas portion of air travel for enlisted personnel. Officers are allowed 165 pounds. In either case, special authorization from order-writing activities is not necessary, unless the excess baggage is being carried in connection with TAD orders.

The free allowance for all passengers traveling Commercial Air (Category Z) is 66 pounds. Free carry-on items include handbags, overcoats, wraps or blankets, umbrellas, small cameras, binoculars, infant-carrying baskets, etc. All other baggage must be weighed.

For baggage allowance between the contiguous 48 states and Alaska and Hawaii, consult the airline concerned. Individuals traveling transoceanic commercial air other than Category Z are reminded that free baggage allowance is determined by the class of travel. First class is 66 pounds. Tourist class is 44 pounds. Here again, for all allowances between CONUS, Alaska and Hawaii, check with the airline. Ordinarily, when tourist class is furnished, 22 pounds of excess baggage may be authorized if noted on the orders and on the government transportation authorization.

That's about it.

Somehow, all the pieces fall into order. The request for transportation goes out. The flight confirmation comes in. The pain of the immunizations subsides. And the luggage, believe it or not, gets packed. All things considered, you may find out that half the fun of an overseas assignment is getting there.

Passport Information

While dependents and civilian employees normally are required to carry passports when traveling overseas, passports are not generally required for military personnel traveling overseas, either in official or unofficial status. The military identification card usually suffices.

Below is listed the overseas areas where passports are NOT required. Exceptions are noted.

| Europe | | Panama, Canal Zone |
|-----------------------------|--|--|
| Azores | | Puerto Rico |
| Belgium ⁷ | | Surinam |
| Corsica | | Trinidad |
| Denmark | | Federation of the West Indies |
| France ⁴ | | |
| The Gambia ⁵ | | |
| Germany | | |
| Gibraltar | | |
| Greece ⁴ | | |
| Iceland | | |
| Ireland | | |
| Italy | | |
| Luxembourg | | |
| Malta | | |
| Netherlands | | |
| Norway | | |
| Spain ⁴ | | |
| Sweden ⁶ | | |
| Switzerland | | |
| United Kingdom | | |
| Caribbean and South America | | Africa and Southwest Asia |
| Antigua | | Turkey ^{2,4} |
| Ascension Island | | Libya ^{2,4} |
| Bahama Islands | | |
| Barbados | | |
| Bermuda | | |
| Grand Turk | | |
| Guadeloupe | | |
| Guantanamo Bay, Cuba | | |
| Jamaica | | |
| Martinique | | |
| | | Pacific, Australia and Southeast Asia |
| | | Alaska |
| | | Australia ³ |
| | | Chi Chi Jima |
| | | Guam |
| | | Hawaii |
| | | Hong Kong ⁵ |
| | | Iwo Jima |
| | | Japan ⁴ |
| | | Korea ⁴ |
| | | Kwajalein |
| | | Mariana Islands |
| | | Marshall Islands |
| | | Midway |
| | | Philippines ² Republic of the |
| | | New Zealand ⁵ |
| | | Taiwan ^{4,5} |
| | | Republic of South Vietnam |
| | | Volcano Islands |
| | | Thailand ¹ |
| | | Pacific Islands |

NOTE:

1. Passports are not required if travel is on MAC and in uniform. If commercial air is used, passport is required. And if stay in Thailand is to be in excess of 15 days, visas are also required.

2. Military personnel are exempt from passports and visas if orders specify PCS or TAD assignment to U. S. bases. Passports and visas are required for all military personnel entering by commercial transportation in civilian clothing. If on leave, you will require a passport.

3. Military personnel on leave require passports.

4. Passports required by military personnel assigned to MAAG.

5. Personnel must be in uniform.

6. Personnel not assigned to NATO require passports.

7. Passports required by military personnel assigned to USNATO, U. S. Delegation to the NATO Military Committee, Defense Attache's Office, MAAG, and U. S. Delegation to the Military Agency for Standardization.



REFRESHER TRAINING

GUANTANAMO BAY is primarily a military outpost on an island which is a communist domain.

It is also a training ground for the Fleet. Naval vessels may arrive at Gitmo as disorganized and inexperienced fighting units; they leave well trained and ready to take their place with the rest of the Navy.

The seven weeks of intensive drills and exercises recently spent by USS *Albany* (CG 10) at Gitmo might be considered as typical of most cruiser or destroyer units.

During this episode, she underwent meticulous scrutiny by members of the Fleet Training Group. The seemingly countless hours spent at general quarters, damage control and engineering drills, warfare exercises, man overboard and abandon ship drills were, in the early portion, sheer hard work and frustrating.

However, as time progressed, so did *Albany*.

Incessant repetition of drills, supplemented by im-

This type of damage control equipment was the rule rather than the exception for most repair party personnel participating in refresher training aboard USS *Albany* (CG 10).

promptu quizzes by the FTG people, resulted in improved efficiency. Crew and ship began to operate as if they were made for each other.

THERE ARE MANY phases to the Gitmo curriculum. Each drill, each exercise, plays a big part in getting *Albany* — or any other cruiser — into shape.

One of the big chunks of shakedown training is damage control. Basically, damage control means preparing a ship for damage repair in time of war. In peacetime, DC's main purpose is to handle emergencies such as shipboard fires, pipeline ruptures, mechanical or electrical breakdowns, or any such catastrophes as might be encountered.

Even in 'peacetime, such mishaps occur more frequently than might be expected. Within the past five years, for example, the Navy has experienced 10 major fires in the Fleet, and has lost three destroyers plus extensive damage to other ships in the process. And destroyers are not the only victims. Both *Enterprise* and *Forrestal* have been put out of action because of fire.

But Damage Control means other things: Fire parties, repair locker equipment, collision parties, the training of rescue and assistance teams, setting material conditions.

It was the latter which was *Albany's* headache at Gitmo. In the beginning, improper setting of condition Zebra cost the ship a bucketful of points, and required the ship to redrill for several weeks on the setting of material conditions.

The tough break was understandable. *Albany* has approximately 1500 classified fittings which need closure; this entails some 42 compartments in which conditions Yoke and Zebra must be observed. All it needs is four improperly set fittings to give a repair party an unsatisfactory grade.

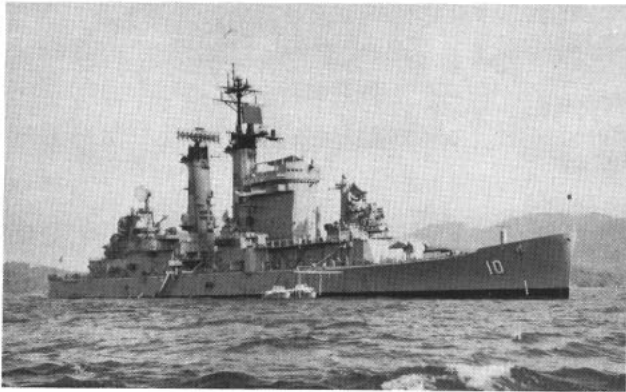
During GQ, one-third of *Albany's* crew, roughly 400 men, are involved in repair parties. Everyone knew it was a rare occasion for a ship the size of *Albany* to pass the setting of material conditions.

Albany did manage to score a "good" during her final days of training.

THE MAIN PURPOSE of all the drills conducted during Refresher Training was to train the crew to work well and safely. The time factor was important in the drills, but safety was the major consideration.

All the exercises were, of course, merely drills. But one became the real thing when, during an engineering drill, a pipeline actually did rupture. Relatively unperturbed, the crewmembers proceeded to patch the break just as if it were a drill. They had never really patched a break before, but it was no worse than the drills they had gone through. They knew what to do, and did it.

BY AND LARGE, *Albany* didn't do too badly for a ship in commission for only a year.



The guided missile cruiser USS Albany (CG 10), equipped with both long and intermediate range surface-to-air missiles and an antisubmarine rocket, is one of the Navy's most modern ships.

In the CIC, for example, the Naval Tactical Data System was put to the test in simulated antiaircraft warfare. NTDS was used in conjunction with the weapons system's digital computers in the solving of battle problems. An over-all mark of "Good" was earned by CIC from the FTG observers.

Communications also was the subject of observations during signal and radio drills. The signal bridge exercised at the reception and transmission of signals from ship to ship by use of flags, flashing light, semaphore, yardarm blinkers and Nancy (an infrared flashing light used for sending messages).

Navigation came through with an "Excellent" in low visibility piloting, swept channel exercises and precision anchoring.

Meanwhile, the sonar technicians below decks were deeply involved with antisubmarine warfare in all its phases. A large portion of time was devoted to ASW training exercises.

The crews of the 5-inch guns startled everyone aboard by earning a mark of "Outstanding" for their final grade.

After seven weeks of high-pressure training, drilling and observation, correction and re-drilling, the men of *Albany* did not do too badly, one of her officers said modestly. Of the 13 categories in which she was tested, she received two outstandings, four excellents and four goods. Her over-all percentile grade was above 85.

And, as someone observed: "She went to Gitmo as a ship; she returned as a man-of-war."

DAMAGE CONTROL XVI

ALL HANDS has published a series of articles on the subject of safety and damage control. For your information (and possibly review by members of the crew) here they are:

| ARTICLE NAME | MONTH | YEAR | PAGE NO. |
|---|-------|------|----------|
| Fire in Hangar Bay One! | Feb | 1967 | 12 |
| A Ship Full of Heroes | Nov | 1967 | 6 |
| Firefighting: 'Purple K' and 'Light Water' Washdown | Mar | 1968 | 2 |
| The Crash Crewman: Training at NATTC Memphis | Mar | 1968 | 4 |
| What Do You Know About OBA? | Apr | 1968 | 28 |
| Here Are the Latest Rules on Handling OBA | Jun | 1968 | 38 |
| Firefighters Keep It Cool | Oct | 1968 | 20 |
| Introducing: Naval Safety Center Courses in Damage Control & Firefighting for All Hands | Dec | 1968 | 52 |
| TraLant Lists Changes in Damage Control, Firefighting Courses | Feb | 1969 | 43 |
| USS Enterprise: Back Into Action | May | 1969 | 16 |
| The Carrier: A Basic Program for Safety and Endurance | May | 1969 | 18 |
| Quals for Firefighting Assistant Are Outlined in Latest Changes to Manual | Jun | 1969 | 44 |
| Firefighters in Training Ashore & Afloat | Jul | 1969 | 6 |
| Hazardous Material Control | Feb | 1970 | 26 |

everyone to be successful. It is, in fact, the responsibility of everyone on board to carry out good "ship-keeping" practices which, in turn, will prevent fires.

The following report covers, in general terms, some of the aspects of gas hazards and explosive vapors that should be understood by the average crewmember.

For those who are more closely connected to this area of responsibility, the rate training manuals, *Damage Control 3 and 2*, and *Damage Controlman 1 and C* and the *Navships Technical Manual*, Chapters 9920 and 9930, will be well worth studying, even though you are not a damage controlman.

The three substances that constitute the greatest explosive-vapor hazard on board ship are gasoline, fuel oil, and carbon monoxide. The quantities of alcohol, ether, and kerosene carried on board ship constitute a minor vapor hazard.

Gasoline—Gasoline gives off flammable vapors at temperatures as low as -40°F . Gasoline vapor is heavier than air, and tends to accumulate at low levels; however, it may be carried upward by convection currents.

When gasoline vapor is mixed with air, a highly explosive mixture results. Partially filled gasoline tanks present greater dangers than full tanks.

Tanks that have been "emptied" may be the most dangerous of all.

Fuel Oil—Although fuel oil does not ignite easily and is not explosive at ordinary temperatures, a mix-

IT ISN'T the exclusive job of damage controlmen to prevent fires at sea. It requires the cooperation of

bulletin board

ture of *fuel oil vapor and air* above 150 degrees Fahrenheit is explosive.

Like gasoline, fuel oil vapor is heavier than air and tends to accumulate at low levels such as in bilges and at the bottom of tanks where it may remain undiscovered until ignited by a flame or a spark.

Some fuel oil vapor is always present in partially filled tanks and in empty tanks that have not been properly vented.

Carbon Monoxide—This deadly gas is produced by the incomplete combustion of all substances. It is also a product of slower oxidation processes such as the decay or decomposition of animal and vegetable materials.

Carbon monoxide is present in the exhaust gases of internal combustion engines. It is present to some extent at any fire and may be in relatively high concentrations when coal, coke, oil, or gasoline is being burned.

Very large amounts of carbon monoxide may be produced by a fire in a closed or poorly ventilated compartment, since the amount of air available is not likely to be sufficient for the complete combustion of the burning substance.

You probably know that carbon monoxide is extremely poisonous, but you may not have realized that it forms an explosive mixture with air when the concentration of carbon monoxide in air is anywhere between 12.5 and 74 per cent by volume—a very wide explosive range.



A crash crewman mans firefighting equipment at a training fire.



Crash crewmen move in to battle an aviation gas fire during a training exercise.

An open flame or spark will cause an explosion of any mixture of carbon monoxide and air within these limits, regardless of the temperature of the mixture.

The toxic hazard presented by carbon monoxide is a treacherous one, inasmuch as the gas is odorless and cannot be seen in a concentration in air of 0.5 to 1.0 per cent by volume; it is deadly if inhaled for more than a few minutes.

That's why, if a firefighter enters a compartment containing carbon monoxide, he must use an oxygen breathing apparatus. A lifeline manned by another firefighter is attached to the harness of the apparatus.

Aboard your ship, there are various types of Combustible Gas Indicators. The indicators detect mixtures of air and combustible gases or vapors from fuel oil, gasoline, hydrogen, acetylene and other volatile substances. As a rule, the indicators show the percentage of combustible gas present in the atmosphere. A combustible gas indicator must be used in strict accordance with the instructions of the manufacturer and NavShips.

NavShips says that individuals qualified by training and experience will decide in specific instances which precautionary measures should be used. One person aboard each naval vessel will be authorized and designated as a "Gas Free Engineer." They may be either officers or enlisted men who have been trained in this type of work in a course that used the *Fire Marshal and Gas Free Engineer's Manual*. No person may enter a suspected compartment or space until authorized by a representative of the Gas Free Engineer.

Every precaution must be taken to prevent the ignition of explosive vapors. Sparks from electrical equip-

ment and sparks resulting from an accumulation of static electricity are regular hazards aboard ship. Electrical equipment in areas where an accumulation of vapors is suspected should be deenergized and an accumulation of static electricity should be prevented wherever possible.

Here are a few suggestions that may be applicable to your job aboard ship:

- Maintain vents and galley hoods, keeping them free of oil and grease.
- Keep containers of volatile liquid tightly closed and properly stowed.
- Prevent the accumulation of oil and grease in the bilges.
- Keep quarters and workshops free of waste material.
- Put oil, tallow and rags into metal containers and store them as far from fire hazards as possible.

- Stow in safe places all but indispensable minimum amounts of dangerous combustibles.

- Use no open lights and electrical equipment whenever an explosive vapor hazard exists without approval from the Gas Free Engineer.

- Bare skin is burned instantly by the flash of an explosion. That's why observation of shipboard regulations relative to the uniform is very important, whether or not you are a member of a firefighting party.

- It goes without saying that eyes are sensitive organs and can be easily damaged—even when the fire is at a distance. Are your antflash goggles handy?

These items are more in the province of the damage controlmen aboard but it won't harm you or anyone else on board to know how to use such equipment, to know where it is stowed, and to insist that it is used correctly.

AFFF FOR AMERICA

USS *America* (CVA 66) reports that her high capacity fog foam and flight deck water-washdown systems have been updated with Aqueous Film Forming Foam (AFFF), the latest in synthetic firefighting solutions.

AFFF — chemically identified as LTH_2O — is a concentrate which, when mixed with water, forms a fluorochemical surface agent that develops into a thin foam blanket. When sprayed over an oil or aviation fuel fire, for instance, the blanket becomes a waxy film which prevents the escape of vapor and thereby prohibits further ignition.

According to the manufacturer, LTH_2O is considered more effective in extinguishing fires than the protein foam previously used in *America's* fog foam stations.

Except for the change in foam solutions, all *America's* firefighting equipment and systems have remained the same. Her foam stations located below decks are still remotely controlled from the hangar deck or the flight deck and can supply the foam solution at the touch of a button.

The ship's water-washdown system is also supplied with LTH_2O as an added firefighting measure. Controlled by a panel of switches on both the navigation bridge and in the flight deck control tower, this topside system is comprised of 17 sections that surround the flight deck. Like the high capacity fog foam stations, the washdown system can extinguish a blaze on any section by the push-button method.

Flight deck water-washdown system springs into action aboard USS *America* (CVA 66) during Caribbean operations.



That Deadline Is Rapidly Approaching for Cinematography, Photo-Journalism Courses

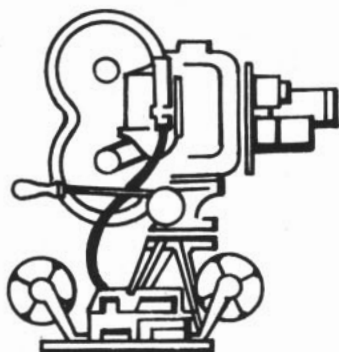
JOURNALISTS and photographers are reminded that 15 April is the application deadline for special college courses in cinematography, photo-journalism and motion picture scriptwriting.

A course in photographic quality control has an annual deadline of 15 February.

Details on these courses are contained in BuPers Notice 3150 (12 Dec 1969). Here, in summary, is what the notice said:

Officer Cinematography

A class in cinematography for naval officers convenes each September at the University of Southern



California. The course takes two years, and the Navy quota is two officers each year.

Limited duty officers 663X (Photography) in grades LT, LTJG and ENS, and warrant and chief warrant officers 831X (Photographer), may apply. Applicants must have less than 16 years' service on 1 July of the year enrolled, and must:

- Agree to serve one year of active duty for each six months of training.
- Be recommended by the commanding officer.
- Have satisfactorily completed PH "B" School.
- Have completed a one-year college-level GED course or have equivalent formal schooling.
- Not be a graduate of the enlisted cinematography course.

Applications should be submitted to the Chief of Naval Personnel (Pers-B2143) before 15 April. A copy of the request should be forwarded to the Chief of Naval Operations (Op-03R3).

Officers who complete the course are normally assigned to motion picture production duties.

Enlisted Cinematography

A one-year course in cinematography begins each September at the University of Southern California for male photographer's mates in grades E-5 and above who meet the following:

- Less than 15 years' service if E-7 or above; not more than 12 years' service if E-6; less than 10 years' service and career designated if E-5. Time in service is computed from 1 July of the year enrolled.
- Commanding officer's recommendation.

• Graduate of Class "C" Motion Picture Camera School or at least one year of field experience.

• Combined GCT/ARI of 110 or higher.

• High school graduate or service accepted equivalent.

• Not a graduate of the Syracuse University photo-journalism course.

• Two years' obligated service after completing the course.

Requests and the special report of enlisted performance evaluation (NavPers 792) must be submitted to the Chief of Naval Personnel (Pers-B2143) before 15 April. A copy of the request should be forwarded to the Chief of Naval Operations (Op-03R3).

Those who complete the course receive NEC PH-8144 (Motion Picture Director) and assignments to mobile photographic units and other activities with motion picture production capabilities.

Photo-Journalism

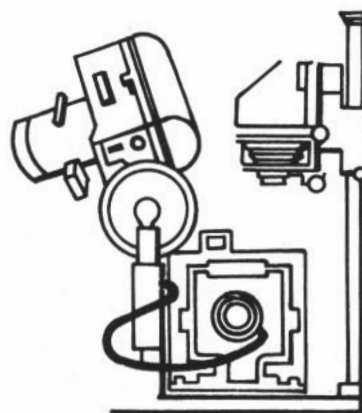
A one-year class in photographic journalism is convened at Syracuse University each September for:

— Limited duty officers (663X Photography) in grades LT, LTJG and ENS.

— Warrant and chief warrant officers (831X Photographer) who are primarily engaged in photographic duties.

— Male journalists and photographer's mates in grades E-5 and above who have less than 15 years' service if E-7, E-8 or E-9; less than 12 years' service if E-6; less than 10 years' service and career designated if E-5. Time in service is computed from 1 July of the year enrolled.

Applicants should be able to type approximately 20 words per minute, must have a CO's recommendation, and must:



• Be a high school graduate or have a service-accepted equivalent.

• Have a combined GCT/ARI of 110 or higher.

• Have two years' obligated service after completing the course.

• Not be a graduate of the University of Southern California cinematography course.

Your request, accompanied by a special report of

enlisted performance evaluation (NavPers 792), if appropriate, must be addressed to the Chief of Naval Personnel (Pers-B2143) before 15 April.

A copy of the request to the Chief of Naval Operations (Op-03R3) must be accompanied by a portfolio of at least 10 recent photographs you have made, plus a 200-to-250-word autobiography of your naval service, written in news style. An officer must certify that the photographs and autobiography are your original work.

Graduates of the photo-journalism course receive NEC 8148 (Documentary News Still Photographer) and are assigned to major staffs, mobile photographic units or other activities with appropriate requirements.

Scriptwriting

A one-year course in motion picture scriptwriting convenes each September at the University of Southern California. You may apply if you're a JO in grade E-5 or above, or a PH2 or higher and have NEC code 8148 (Documentary News Still Photographer). You also must meet the following:

- Less than 15 years' service if E-7, E-8 or E-9; not more than 12 years' service if E-6; less than 10 years' service and career designated if E-5. Time in service is computed from 1 July of the year enrolled.
- High school graduate or service accepted equivalent.
- Combined GCT/ARI of 110 or higher.
- Two years' obligated service upon completion of the course.

Your request, accompanied by your CO's recommendation and a special report of enlisted performance evaluation (NavPers 792), must be submitted to the Chief of Naval Personnel (Pers-B2143) before 15 April. A copy of the request should be sent to the Chief of Naval Operations (Op-03R3).

When you complete the course you receive NEC 8146 (Motion Picture Scriptwriter) and assignment to a combat camera group or other activity which has a large motion picture production capability.

Quality Control

This special 10-week course, Quality Control of Photographic Processing, is held each summer at the Rochester Institute of Technology for photographer's mates in grade E-5 and higher who meet the following:

- Less than 15 years' service if E-7 or above; not more than 11 years' service if E-6; less than 10 years' service and career designated if E-5. Time in service is computed from 1 July of the year enrolled.
- Graduate of PH "B" School.
- Two years' obligated service after completing the course.
- Combined GCT/ARI of 110 or higher.
- High school graduate or service accepted equivalent.
- CO's recommendation.

Requests should be addressed to the Chief of Naval Personnel (Pers-B2143) before 15 February of a

Here's an Opportunity for Choice Billet With Ceremonial Guard—If You Qualify

IF YOU'RE HEAVY on leadership and interested in a challenging and rewarding assignment in the nation's capital, duty with the Navy Ceremonial Guard may be to your liking. As noted elsewhere on these pages, the Guard has nine petty officer billets which usually are filled with men in ratings such as Boatswain's Mate, Gunner's Mate and Signalman.

To qualify for the duty, you must be between six feet and six feet, four inches tall, have good posture, be neat and physically fit and must present an outstanding military appearance. Also, you must:

- Have a GCT of 45 or higher.
- Be eligible for a White House security clearance in accordance with SecNavInst 5312.12.
- Have a knowledge of basic drill fundamentals.
- Have good vision (eyeglasses may not be worn during ceremonies).
- Be eligible for assignment ashore under Seavey.

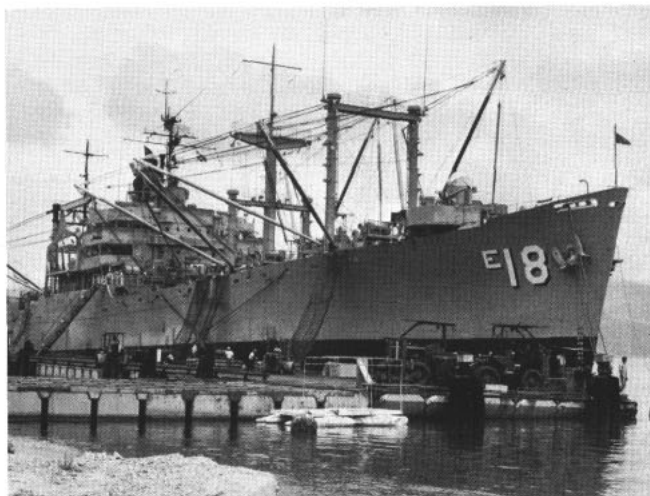
The Washington area detailer, Bureau of Naval Personnel (Pers-B2124), handles assignments of petty officers to the Ceremonial Guard. Your preference for this duty should be indicated on your rotation data card. Petty officers selected for the Guard usually attend leadership school or career information and counseling school en route to Washington, D. C.

given class year. A copy of the request should be sent to the Chief of Naval Operations (Op-03R3).

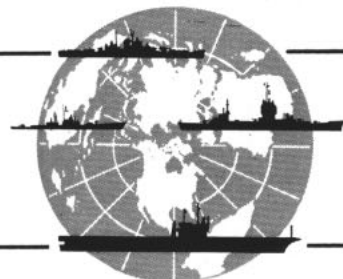
The NEC assignment after Quality Control School is PH-8126 (Photographic Quality Controlman).

A tip before entering this course: Bone up on logarithms.

MAJESTIC VIEW—USS *Paracutin* (AE 18) takes aboard supplies at Subic Bay Naval Base.



Letters to the Editor



Even Multiples on Work

SIR: Under the old quarterly marks system, a man could be graded in both odd multiples (such as 3.5, 3.7 and 3.9), and even multiples (3.6, 3.8, 4.0).

Now, with the Enlisted Performance Evaluation, the marking blocks correspond only with the 10 even multiples from the lowest, 2.2, to the highest, 4.0.

At least two executive officers I've talked with believe that an odd multiple, such as 3.7, is indicated with an X on the line between the 3.6 and 3.8 blocks. I say this should not be done, because the *BuPers Manual* lists only even multiples as the equivalent marking numbers.—YNC H. H. J.

• And you are correct. The present evaluation system does not provide for marks other than the even multiples of 4.0, 3.8, 3.6, etc.

An odd multiple often results when a man's page nine is closed out and averaged, or when his performance marks are averaged for an advancement factor. However, these are the only times you might see an odd performance multiple such as 3.9 or 3.7.—ED.

No Change for AMEs

SIR: I reference your Detailer article on page 39 of the October 1969 issue of *ALL HANDS*—What's this about the AM general rating absorbing the AM (E, H and S) service ratings?

I just shipped for AME "B" School. But now, on the basis of your article, I'm a little concerned as to what my rating will be in the near future. If this absorption is in the cards, AMs and AMHs should be able to make the shift smoothly with little difficulty. But we AMEs, I'm afraid, are in for some stripped gears.

—AME1 M. M., USN

• No need here to race your motor or shift gears. It is true that proposals

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, *ALL HANDS*, Pers G15, Bureau of Naval Personnel, Navy Dept., Washington, D.C. 20370.

have been made in the Bureau to have the AMH and AMS service ratings compressed, and a study on this matter is being conducted in depth.

However, from this study there has been no recommendation in any form to compress the AME service rating. Your rating is considered "distinctive in scope" and it is fully expected that the integrity of the AMEs will be maintained now and in the future, either as a service rating or as a separate general rating.—ED.

Ribbon of Friendship

SIR: I recently asked the Bureau of Naval Personnel to verify the medals and awards which I am authorized to wear. Imagine my surprise when they mentioned one I have never heard of.

It was the Friendship Ribbon which was awarded to my command—uss *Montrose* (APA 212) while on duty in Vietnam in 1954.

Can you tell me something about its appearance, precedence and what I did to deserve it?—C. E. B., CS1, USN.

• The decoration must have been the Ribbon of Friendship, a Vietnam Presidential Unit Citation. It recognizes the humanitarian assistance rendered by U.S. naval units which participated in the evacuation of civilians from north Vietnam following the 1954 Geneva Convention.

Under the terms of the Geneva Convention, Vietnam was partitioned along the 17th parallel. Those who

did not wish to live in the area of communist control were given an opportunity to migrate south. The United States was asked to furnish ships to carry the expected refugees.

U. S. Navy Task Force 90 was formed for this purpose and, before it was dissolved on 20 May 1955, it carried hundreds of thousands of people to South Vietnam.

Navymen who were in a unit designated as one which helped move the refugees are entitled to wear the Ribbon of Friendship. It is worn after all U. S. campaign and service ribbons, after all foreign personal decorations and after the Philippine Presidential Unit Citation Badge and the Korean Presidential Unit Citation.

The insignia consists of a red and yellow bar enclosed in a gilt frame. It is not stocked by the Navy Department but can be purchased at most uniform stores.—ED.

3M Data Analyst

SIR: Maintenance of various systems has grown so complex that rapid accounting has become necessary. This brings a need for highly trained men to handle source data and perform analysis, to help maintenance managers establish their policies.

These men study and work in data analysis full-time—an area outside their rating. Are there any plans to establish a 3M Data Analyst rating?

—AZ1 R. L. D., USN

• No. According to the AZ-AD-AM-PR rating control people, there aren't enough requirements for data analysts in the lower pay grades, or enough people in any pay grades working in data analysis, to warrant the establishment of a new rating or service rating.

However, BuPers is studying a possible alternative. Men who hold NEC 6313 and who would like to be tested on their skills as data analysts might be allowed to choose a separate set of

advancement quals and tests in that area. If this idea is adopted, you'd still be an AZ, but you would be recognized as a specialist in data analysis.—Ed.

Official Orders to Polaris Sub

SIR: In your November 1969 Letters to the Editor you gave Chaplain E. D. I. the go-ahead to purchase and wear the SSBN Deterrent Patrol Insignia based on his having made a Polaris patrol in 1964. By what authority?

BuPers Manual, Article 1420130, authorizes the Polaris pin individually for members of the naval service who complete one or more SSBN deterrent patrols while "regularly assigned" to submarine duty.

I am not aware that any chaplains are "regularly assigned" to duty in submarines. What's more, the chaplain's rank of commander indicates that he could not have been anything other than a chaplain in 1964.

Please clarify.—YNCS (SS) J. E. B., USN.

• You are correct, Chief, in your reference to the "BuPers Manual" article citing the eligibility requirements for issuance of the SSBN Deterrent Patrol insignia.

However, the stipulation, while "regularly assigned to submarine duty," has been interpreted by the submarine qualifications desk to include naval personnel who are under official orders to a Polaris submarine for a specific time during which a patrol is made.

Of incidental interest, a recent interpretation also extends the authorization to midshipmen who complete a Polaris patrol during a summer cruise. — Ed.

Square-Knot Chief

SIR: Has there ever been an official rating of "Square-Knot Chief"? If not, was there some official honorary rating, granting a person the pay and privileges of a chief petty officer?

I knew of a man at Sampson Training Center during WW II who was allowed to wear the uniform. He was 70 years old, and had joined the Navy

at the age of 14 as a cabin boy.—D. R. G.

• It was never a rating, in the sense of a specialty. But there was a time when many chiefs and other Navymen did wear a figure-eight knot embroidered on the lower part of their sleeve.



Apprentice CPO rating badge

The mark—similar to the knot in present-day recruit petty officer rating badges—designated men who had entered the Navy as apprentices (not apprentice seamen) under a system which lasted from the 1870s until 1904.

We suppose you could call a recruit chief petty officer—the member of a boot-camp company who is in charge under the company commander—a "square-knot chief," because he does wear a miniature CPO rating

If anyone would ever qualify as a "square-knot chief," TMC Harry Morris, USN(Ret), certainly would.



badge with a figure-eight knot as the specialty mark. (See cut.)

However, the insignia worn by the old-time former apprentices was a different matter entirely. It was a separate insignia, not part of a rating badge, worn in the same position as modern hashmarks. The recruit CPO must take off his "baby crow" when he leaves boot camp today; but the former apprentices wore their knot throughout their careers.

Since apprentices enlisted between the ages of 14 and 18, many of those who joined around the turn of the century—shortly before the apprentice recruiting program was abolished—were still in the Navy in the 1930s and 1940s. In that many years of service, most of them had advanced to chief.

As far as we know, the last "square-knot chief" of this kind was TMC Harry Morris, who joined in 1903, retired in 1958, and at last report was still going strong.

By 1941, however, the knot insignia was no longer designated in "Uniform Regs." The old-timers who were still wearing it then had to explain its meaning to any youngsters who asked—and we're sure that most of them took full advantage of the opportunity to spin a few yarns.—Ed.

On Retirement

SIR: I've been told that constructive time may not be counted toward my pending disability retirement. Is this fair?

Also, I wonder if as a disability retiree I will be eligible for cost of living increases in my retired pay.—QMCM J.L.R., USN.

• What's fair is for you to decide, but we can tell you that the laws on constructive time do not apply to disability retirement; constructive time may not be used when computing disability retired pay. (For a discussion of how constructive time may be used, see "Twilight Cruise," ALL HANDS, page 61, September 1969.)

The laws on retired pay and cost of living increases generally say this:

If your retired pay is based on the 1 Jul 1969 pay scales, you will be entitled to a 0.9 per cent increase effective 1 Nov 1969 or the date you

Letters to the Editor

retire, whichever is later.

Those whose retired pay is based on the pre-1969 pay scales received a 4.3 per cent increase effective 1 Nov 1969.

You will be entitled to full retired pay cost of living increases which follow the 1 Nov 1969 increase.—Ed.

After 25 Years

SIR: I thought you might be interested in this photograph taken last year in Klamath Falls, Ore. It depicts the reunion of two former shipmates who served on board USS *San Francisco* (CA 38) during World War II.

At the left is J. Murray Britton, the Sheriff of Klamath County, Ore. I'm at the right.

During the war, Murray was a bosun's mate on board *San Francisco* and was the champion boxer, heavy-weight division, of Cruisers Pacific. I served as *San Francisco's* chaplain for two years at the time Murray was on board.

In the picture, Murray shows me the dollar bills he won as a prize for surviving the longest in a blindman's buff free-for-all in the boxing ring. The bills were the old currency imprinted with "Hawaii" for use in the Islands during wartime. I believe they now are something of a rarity.

Former shipmates, J. Murray Britton (left) and Dean Francis B. Sayre, Jr., get together after 25 years.



I presented the bills to Murray 25 years ago, and until the reunion in Klamath Falls last year, we had not seen each other.

I believe this once more illustrates the deep and abiding friendships which often are germinated among those who serve in our naval ships.—Francis B. Sayre, Jr., Dean of Washington Cathedral, Washington, D. C.

• We agree. Thank you for sharing the news of this Navy reunion with us.—Ed.

Reenlistment Option

SIR: Any truth to the rumor that four year enlistments are being cut to three years?

If there is, does it mean I can be separated after serving three years of my four-year enlistment?—QMSN N. H. O., USN.

• "No" to both questions. As usual, we wonder how such rumors get started.

This one might have spawned last summer after announcement of the change to authorized reenlistment periods. To review:

BuPers Notice 1133 (29 May 1969) liberalized reenlistment options for career Navymen. You formerly could

choose only a four- or six-year period for your second and later reenlistments. Only those who were shipping over for the first time could choose a two-, three-, four-, five- or six-year reenlistment period.

Now, anyone who is eligible for Regular Navy reenlistment, first, second or otherwise, has the two-to-six year option, provided the period he chooses will exceed his service obligation by one year or more.

This tied in with an earlier BuPers Notice 1133 (13 Mar 1969) on reenlistments, which in turn tied in with Variable Reenlistment Bonuses (ALL HANDS, June 1969). If you reenlist one year early in order to draw a VRB, or for any other reason, you must obligate yourself for at least one year beyond your current obligation. This requirement remained in effect, and the combined word now sounds like this:

If you reenlist up to one year early, your reenlistment period must be enough to cover the time remaining on your present enlistment, plus the length of any extensions, plus at least one additional year. If two years will take care of it, fine. If not, pick a higher number, up to and including six.

Obviously, this has nothing to do with the early out rumor you heard, but it does account for a situation where a man might reenlist for three years instead of four.—Ed.

Mileage and FSA Payments

SIR: I recall reading somewhere that if I was on temporary additional duty when it came time for me to reenlist that I would be authorized payment of mileage to either my home of record or place of acceptance provided the payment does not exceed that which I would otherwise be entitled from my permanent duty station to my home of record or place of acceptance.

This seems logical since it would preclude TAD trips for reenlistment to gain a higher mileage payment. However, the local disbursing office disagrees with me and is paying from the place of reenlistment to home of record or place of acceptance while an individual is on TAD orders.

What's the proper procedure?

While I'm at it, here's another question. With regard to Family Separation Allowance—Type T—is a member entitled to draw FSA-T while his dependents are occupying government quarters?

I recall the terminology of the directives was changed from "those personnel receiving BAQ" to "those personnel entitled to BAQ." This difference in terminology seems to be the basis upon which some disbursing offices pay FSA-T and some do not. Again, what's the answer?

—PNC R. A. S., USN.

•First of all let's establish that the place of separation and your home of record, or place from which you were ordered to active duty, are all located within the United States.

Upon your reenlistment, you would be entitled to mileage from your last duty station to your home of record, or place from which you were ordered to active duty, whichever you choose. This ruling is spelled out in the "Joint Travel Regulations," para. M 4157.

The term "last duty station" at the time of separation means, according to JTR para. 1150-12, the last permanent, temporary or temporary additional duty station where you are, in fact, on duty.

Since all orders directing performance of TAD must be for the purpose of official business, TAD trips for reenlistment purposes only would not be issued. Therefore, the payments being made by your local disbursing officer are proper.

In reply to your question on Family Separation Allowance—Type T: If a member's dependents are occupying Government quarters for which rent is not paid, he is not entitled to draw basic allowance for quarters in their behalf. And, when a member is not entitled to BAQ on behalf of his dependents, he cannot be entitled to FSA-T.

On the other hand, when no adequate Government quarters are furnished, a member with dependents who is entitled to basic pay is entitled to BAQ at the rates prescribed for members with dependents. Under such conditions the member would also be entitled to family separation allowance.

In this regard, para. 30304a of



USS Sylvania (AFS 2) changed her home port from Naples to Norfolk after four and one-half years in the Mediterranean.

"Department of Defense Military Pay" and Allowances Entitlements Manual (DODPM) is quoted in part for your information: "FSA-II (includes FSA-T) is payable to each member serving in pay grade E-4 (over 4 years' service) or above, who is entitled to BAQ as a member with dependents."—Ed.

Oglala Can't Stop Cruising

SIR: Some time ago you did an article on ships' names (It's Oglala, Not Ogallala, ALL HANDS, March 1969); you might be interested in a few recollections from someone who served on board her 48 years ago.

In 1921, I was the captain's writer on board the aviation tender ship when her name was Shawmut and she served as a base for the aerial bombardment of captured German ships off Hampton Roads, Va.

She was flagship of the then Atlantic Air Force of the Navy, operating with the four-stacker destroyer USS Harding and the seagoing tug Sandpiper. Harding's CO was Commander Albert C. Read, who first flew the Atlantic in the NC-4.

I recall that whenever bad weather was imminent, the pilots of the NC and F-5L planes would move their aircraft away from Shawmut and then return to the tender when the storm had blown over.

While the bombing was taking

place off Hampton Roads, a large contingent of naval attaches and other military officials visited us from Washington, and then later in the summer of 1921, we moved to Newport for torpedo plane practice. I believe our Navy originated this method of attack, and our plane crews became quite expert in this form of warfare.—M. C. Jones, ex-Navy, Houston.

•Having participated in events that most of us can only read about in Navy history books obviously is one of the fringe benefits of oldtimer status. Thanks for sharing your recollections of one phase in the long life of USS Oglala (ARG 1), which, as you say, was known as Shawmut in 1921.

Oglala was built in 1907 as the merchant ship SS Massachusetts. She was acquired by the Navy and commissioned in January 1918 as USS Shawmut for World War I service as a minelayer.

About 1920, Shawmut was refitted as an aircraft tender to operate with the fledgling naval air arm.

On 1 Jan 1928, her name was changed to Oglala as a gesture by President Coolidge who had been made an honorary chief of the Oglala tribe during a visit to South Dakota the year before.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, **ALL HANDS Magazine**, Pers G 15, Arlington Annex, Bureau of Naval Personnel, Navy Department, Washington, D. C. 20370, four months in advance.

• **uss Oklahoma (BB 37)**—A reunion will be held May 1, 2, 3 at the Benjamin Franklin Hotel, Philadelphia. For more information, write to Edward H. Lutz, 673 Lindley Road, Glenside, Pa. 19038.

• **uss South Dakota (BB 57)**—A reunion will be held July 3, 4, 5 in Sioux Falls, S. D. For further information contact Ray Kanoff, 302 North 14th St., Norfolk, Neb. 68701.

• **uss Natoma Bay (CVE 62)**—Men who served aboard will hold a reunion in Miami Beach the weekend of 21 to 23 August. R. B. Wall, 1601 N. Johnson St., Arlington, Va. 22201, has the details.

• **uss Philadelphia (CL 41)**—The 7th reunion will be held in Annapolis, Md., 30, 31 July, 1 August. For details, write to Frank J. Amorson, 93 Dunbar St., Somerset, N. J. 08873.

• **uss Boise (CL 47)**—A reunion is proposed to be held in Long Beach, Calif., late in August. If interested, contact E. J. Johnson, 8850 Stardust Lane, Anaheim, Calif. 92804.

• **uss Louisville (CA 28)**—Will hold its reunion July 17, 18 at the Sherman House, Chicago. Contact Vernon G. Mathews, 6323 Bluebell Court, Indianapolis, Ind. 46224, for details.

• **uss Pensacola (CA 24)**—Will hold its second reunion at the Essex Inn, Chicago, Ill. 26, 27 June. For details, contact Donald B. O'Brien, 14725 Turlington Ave.,

Harvey, Ill. 60426.

• **uss Frank Knox (DDR 742)**—Will hold its reunion 6-9 August at Boston. For details, write Hugh Guscetti, 1103 Smith Ave. So., West St. Paul, Minn. 55118.

• **uss Swanson (DD 443)**—A reunion will be held in the Pocono Mountains on 17-19 July. Milburn R. Miller, 134 North Walnut St., Boyertown, Pa. 19512, has the details.

• **uss Hugh W. Hadley (DD 774)**—Will hold a reunion 11 May in Chicago. For details, contact H. S. Robbins, Jr., 325 W. MacArthur Blvd., Oakland, Calif. 94611.

• **uss Henrico (APA 45)**—A reunion is being planned with time and place yet to be determined. Contact J. Chiarini, 1721 76th St., Brooklyn, N. Y. 11214.

• **uss Gosselin (APD 126)**—A reunion is proposed for men who served aboard from 1 Nov 1944 to 1 Feb 1946, with time and place to be determined. Contact John S. Stetz, 320 Third St., Downers Grove, Ill. 60515.

• **LST 810**—A reunion is proposed for men who served aboard during 1944-45, to be held in the Pittsburgh area during the weekend of 17 October. For further information, contact Ray Colburn, 1420 Bay View Drive, Havre de Grace, Md. 21078.

• **DesRon 45**—A reunion will be held in Boston during 6-9 August for men who served with this squadron during WW II in the Pacific. Contact Robert H. Carlson, 146 Oakland Road, Box 238, Wapping, Conn. 06087.

• **DesRon 17**—A reunion will be held in Boston during 6-9 August for men who served with this squadron during WW II in ETO and WestPac. Contact George V.

Palmer, 627 Greenslake Circle, Rossville, Ga. 30741.

• **58th Seabees**—Will hold their 24th reunion 8 to 12 July at the Statler-Hilton in Buffalo, N. Y. Contact Thomas L. Sapio, 169 Leslie St., Buffalo, N. Y. 14211.

• **30th Naval Construction Battalion**—Will hold their 25th reunion 29-31 May. James J. Curron, 85 Cedar St., Springfield, Mass. 01105, can give you the location.

• **uss Peiffer (DE 588)**—Will hold a reunion on July 23 through 26 at Oyster Bay, N. Y. Contact T. N. Mac Intyre, 102 Ivy St., Oyster Bay, N. Y. 11771 for details.

• **uss Richard W. Suesens (DE 342)**—Will hold a reunion on August 6 through 9 at St. Louis, Mo. Details may be obtained from Cal Krause, 422 S. Dewey Ave., Jefferson, Wis. 53549.

• **uss Admiral W. S. Benson (AP 120)**—Is planning a reunion for June 11 at Cedar Rapids, Iowa. Contact Norman E. Erickson, 1298 29th St., NE, Cedar Rapids, Iowa 52402, for details.

• **26th Battalion, NCB**—Will hold a reunion at the Commodore Perry Motor Inn, Toledo, Ohio, August 13 through 16. For more information, contact E. A. Scott, 1506 W. 4th St., North Platte, Neb. 69101.

• **16th Seabee Association**—Will hold its reunion at the Sheraton-Renton Inn on August 6 through 9. Contact Lee R. Smith, 18407 66th Ave., NE, Seattle, Wash. 98155 for details.

• **Veteran Association, 1st Battalion, N. Y. Naval Militia**—Will hold a reunion 25 April at the Officers' Mess, St. Albans Naval Hospital in Queens, New York City. For details, contact J. J. Peck, Cove Road, Oyster Bay Cove, N. Y. 11771.

During the next 13 years, Oglala served as flagship for Pacific Fleet Mine Division One. She was badly damaged during the attack at Pearl Harbor and following extensive repairs, her classification was changed from

minelayer (CM 4) to repair ship (ARG 1).

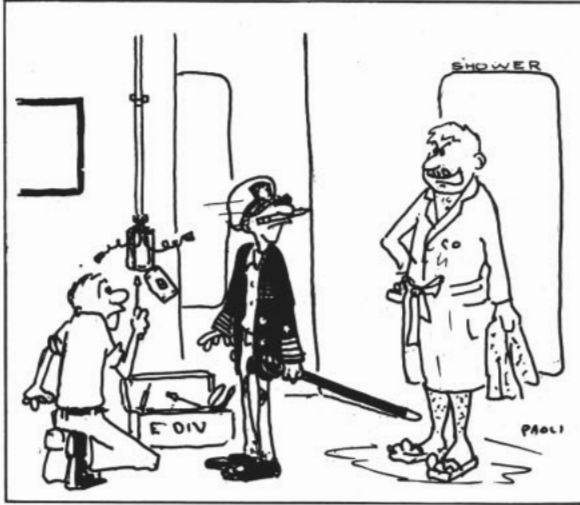
After service in New Guinea, Hollandia and Leyte, Oglala returned to the U. S. for decommissioning. She was removed from the list of ships

in March 1947.

The question last March: Wasn't there once a ship named after Oglala, Neb.?

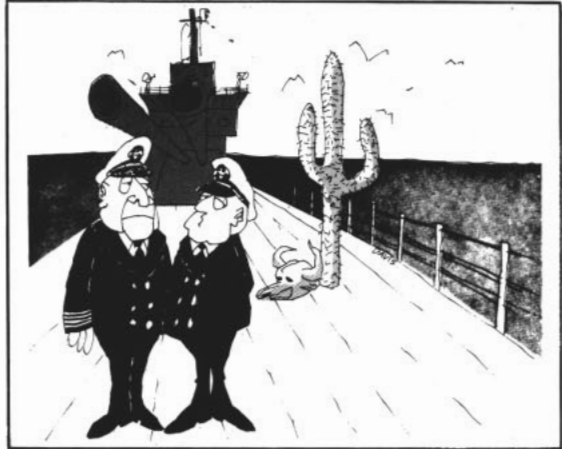
No, but there was the *uss Oglala*. —Ed.

IC1 Jeremiah H. Paoli, USN



"Say! That was pretty good, let's hear you do it again."

LTJG J. C. Davis, USN



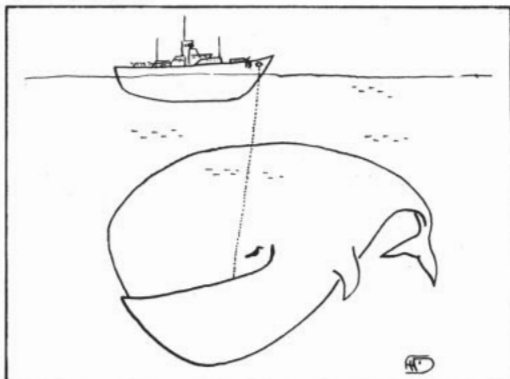
"Don't you think we've been on water hours long enough, Captain?"

CDR Billups E. Lodge, USN



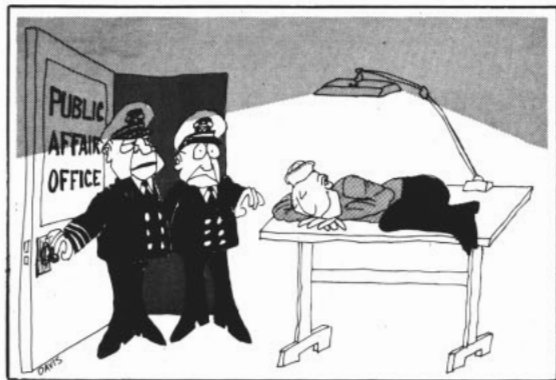
"A million-dollar radar, a million-dollar missile—and this 25-cent marking pencil goes on the blink."

F. W. Donour, Jr.



"Whadaya mean, it won't come up?"

LTJG J. C. Davis, USN



"I think your layout man has the wrong idea."

HMCS Charley Wise, USN



"Well, maybe a healthy economy is based on aggressive, openminded endeavor, but . . ."

TAFFRAIL TALK

MAYBE YOU'RE ONE of the people who think that the space program is scientifically interesting and makes a great TV show—but really isn't of any use to us ordinary Joes on earth.

The Navy's contributions to the space effort were covered in a special report in the March 1970 issue. As a followup, you'll be interested in some of the contributions that have been returned from space to be enjoyed by society. They were discussed by Lieutenant General Samuel C. Phillips, USAF.

The commander of the Space and Missile Systems Organization says that satellites, for example, "are part of a program that is increasingly affecting the way you live, do business and make products, care for your health, educate your children, entertain yourself—in short, your whole life style, and that of many millions of others in this country and throughout the world."

Within this last 24 hours, he noted, the daily existence of every one of us has been touched by at least a few—perhaps by many—spinoff results of the space program which we haven't even paused to identify as such.

"The chances are very good, for instance, that the steak we had for dinner last night came to the kitchen packaged in a tough, transparent polyester film 1/2000 of an inch thick that was originally developed for use in the United States *Echo* satellites — and now packages everything from meats to toys.

"Our vegetables may have been cooked in that very popular heat-resistant and cold-resistant pyroceram ware that originated as an ablative, heat-resistant material for the nose cones of intercontinental ballistic missiles.

"If we fed a pet freeze-dried foods or took a perishable pill we may very well have gotten them from packages of the thin, high-strength aluminum foil originally developed for use in our communications satellite."

You may be wearing one of those electric wristwatches powered by tiny nickel-cadmium batteries which were developed in the search for new power sources for space systems.

Perhaps you shaved this morning with blades which owe their special cutting edge to a thin-film sputtering technique that resulted through molecular electronics space research.

"We have lived and moved in rooms draped and carpeted with fabrics derived from space program developments. We have read magazines, books, newspapers which are the result of new ultradiscriminating measurement processes, new chemistry, new developments in technical optics which have spun off from the space program to revolutionize the printing industry.

"We have listened to radios the size of a cigarette pack and watched television screens not much larger, which are possible today because we reduced the size of electronic components.

"And how many of us this morning read or listened to the weather prediction and mentally adjusted our day around the report from the orbiting eyes in space?"

Along with NASA, the DOD team of Army, Navy and Air Force has contributed much to the space program. The success of the moon launches in turn has contributed to the worldwide prestige of the United States. The benefits mentioned point up the increasing dividends from the space program.

The All Hands Staff

ALL HANDS The Bureau of Naval Personnel Career Publication, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Issuance of this publication approved in accordance with Department of the Navy Publications and Printing Regulations, NAVEXOS P-35. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given **ALL HANDS**. Original articles and information of general interest may be forwarded addressed to the Editor, **ALL HANDS**, Pers G15, BuPers, Navy Department, Washington, D.C. 20370 (see below). **DISTRIBUTION:** By Article 5430100, Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure distribution on the basis of one copy for each 10 officers and enlisted personnel.

The Bureau invites requests for additional copies as necessary to comply with the basic directives. Note that distribution is based on the authorized number of members attached, rather than temporary fluctuating numbers.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U.S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant.

This magazine is for sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Interesting story material and photographs from individuals, ships, stations, squadrons and other sources are solicited. All material received is carefully considered for publication.

There's a good story in every job that's being performed either afloat or ashore. The man on the scene is best qualified to tell what's going on in his outfit.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. **ALL HANDS** prefers clear, well-identified, 8-by-10 glossy prints, black-and-white, and also color transparencies. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. The photographer's name should also be given.

Address material to Editor, **ALL HANDS**, Pers G15, Navy Department, Washington, D. C. 20370.

• **AT RIGHT: LIBERTY IN HAWAII**
—Electronics Technician Communications Seaman (now ETN3) Daniel Hargraves, a crewman of the destroyer USS Carpenter (DD 825), tries his hand at making poi, a native staple food, in a Hawaiian village in Honolulu.





Working Together. A Navy Tradition